

ADDENDUM : Sensational Summerfruit-A bold plan for growth

Executive summary

Commercially sensitive and personal information has been removed from this document in accordance with the Official Information Act 1982 and the Privacy Act 1993. Summerfruit New Zealand believes that omission of this information does not detract from the overall business case.

The vision of Sensational Summerfruit is for a growing vibrant industry with all five summerfruit contributing to the growth in both domestic and export markets. The summerfruit industry has recognised that it is in the midst of huge external forces and change and must take ownership to drive this change favourably. Significant industry development will be needed, characterised by being dynamic and open to change and innovation, with significant scale and greater profitability.

Achieving this will challenge the industry's current practices on every level. However, as discussed at the 2018 Summerfruit Industry conference: "The Status Quo will not cut the Mustard!"

In their letter of 28 September 2018, the Panel requested additional information on a number of matters. This addendum outlines how Summerfruit NZ has responded to the matters raised in the letter.

1. We have developed two new in market works streams, that are part of the larger activity of opening new markets:
 - Develop in-market New Zealand Summerfruit story
 - In market development in key markets

There will be a focus on in-market development in the key markets, with use of the New Zealand Summerfruit story, country specific staff and offices.

These will commence most likely in year three onwards to year seven. Appropriate stop/go points and good project management will be used.

We have been in discussion with the Avocado Industry Council CEO to understand how they carried out a similar programme of work in their PGP (Avocado's Go Global) and the associated costs. On this basis we are anticipating that these new in market work streams will require an additional about \$1.6 -2 million over the second half of the programme.

2. We have commenced an in-depth consultation with exporters to move to a widely accepted commitment to directly invest in the market development activities. Exporters are being consulted on the new in market work streams proposed, how they might be funded through a fee collectible per kg fruit and how the Summerfruit Exporters Committee may be structured for its expanded role.

These matters are not trivial. Further discussion will take place with stakeholders over next couple of months to develop a broader consensus of how to move forward with these work streams and the investment.

3. We have refocused some activities in *Project 1: Understanding Consumers* to engage directly with consumers in preference to using survey driven data insight.
4. We have developed six additional KPIs which will be indicators of increasing investment in the summerfruit industry as the PGP proceeds. They have been chosen because they are measurable and indicate wider macro-economic activity in the industry and not just the outputs from this programme.
 - The leading indicator is the number of tree orders from nurseries and year on year increase. This indicator can also be translated into derivatives such as orchard value, infrastructure and land use.
 - The uptake of new varieties also indicates industry confidence in the potential for new markets.
 - Indicators of downstream supply chain investment are: increasing packhouse capacity from increased fruit volumes and volumes of air freight vs sea freight for each fruit type.
 - Industry statistics such as number of levy payers/growers and number of exporter registrations measure industry growth.
 - Export volumes of fruit is a definitive, but lag indicator.
5. Finally, the panel wanted clarity on the activities that will drive technology uptake and implementation alongside the development of tools and materials. This applies particularly to *Project 4: High performance orchards and improved genetic material* and *Project 5: Industry development*.

As a principle, all information resulting from the project will be made available to all growers and investors, exporters, and marketers associated with the New Zealand summerfruit industry. Because the industry is largely based in two areas: Hawkes Bay and Central Otago, it is relatively easy to organise discussions groups and programmes to drive uptake of information. A range of specific activities are proposed. Many of these have been used successfully over a period of years.

In addition, we will also systematically develop the web portal for sharing information. Webinars will also be explored as a mechanism for industry change. New technology uptake also involves trialling new models of industry enhanced adoption, and these will be implemented.

In summary, we trust these changes and additions will give you confidence in the ability of summerfruit industry to deliver the outcomes the programme seeks.

Additional market development activity

The panel is looking to see a market development workstream with resource committed in market included in the programme and outlined in the addendum.

The IAP think the funding for project 2 is sufficient for the current activity but additional activity as sought will require additional funding rather than reallocation from the existing budget. The IAP is asking for a high level perspective of additional market development activity, an estimate of cost and a commitment from the exporters to fund that if the pre-work identifies it as a meaningful opportunity. This can and should sit alongside well structured stop/go points which I am sure the exporters will seek also. This work is in the programme and MPI will match this investment at 40% level.

Additional workstreams

New activity 2.4.3 : Develop in-market Summerfruit NZ story

- Aligned New Zealand Summerfruit banner, story development
- Build generic promotional material for in market execution.

This would start in about year 3. A stop/go point is proposed.

New activity 2.5 : In market development in key markets

- There will be a focus on in-market development in the key markets, with use of country specific staff and offices.
- These new activities occur in years 4-7 and are shown in the context of the programme in the business case.

This will start after new 2.4.3 in year 4. A stop/go point is proposed.

The PGP programme provides opportunities for exporters to collaborate to build an overall sustainable value and “brand” for all New Zealand summerfruit whilst respecting individual exporter companies and activities.

Project 2 New market development		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Activities	Milestones							
2.1	Market requirements and conditions							
2.1.1	Review current markets for further opportunities							
2.1.2	Identify potential new markets							
2.1.3	Prioritise new markets							
2.2	Competitor analysis							
2.2.1	Identification of competitors in priority markets and fruits for analysis							
2.2.2	Full competitor analysis and production systems							
2.3	Strategies for new markets							
2.3.1	Strategies for NZ markets/fruits							
2.3.2	Strategies for export markets/fruits							
2.4	Opening new markets							
2.4.1	Market access issues identified							
2.4.2	Market trials							
2.4.3	Develop in-market Summerfruit NZ 'story'							
2.4.4	In market development in key markets							
2.5	Traceability systems							
2.5.1	Identify requirements for traceability							
2.5.2	Trial new systems							
2.6	Emerging market channels							
2.6.1	Assess potential and requirements of new market channels							
2.6.2	Develop industry plan for new market channels							
2.6.3	Industry trials							

A new work plan and milestones, with additions highlighted in green, is in the Appendix.

Potential cost of the additional workstreams

We have been in discussion with Avocado Industry Council about their in-market work and its costs. Avocado industry has been engaged in a similar PGP programme of export market development, diversifying from a total dependence on the Australian market and moving into Asia. They have also built the NZ market. In their PGP they have had a focus on:

- New Zealand story for avocados, and
- Market research, leading to a
- Unified plan/strategy for market entry and growth, with
- Generic collateral and key messaging for exporters and marketers
- Target markets Asia and New Zealand.

There was a strong use of online and point of sale collateral and they felt this has worked very well.

The business model was that exporters could draw down upon the generic New Zealand category story, marketing collateral and market research information.

Avocados moved into the following export markets, as well as better penetration into the New Zealand market.

- Japan
- Singapore
- Thailand
- South Korea
- China.

Avocados had a project 1 that included both consumer research and market development. The average cost per year from Avocado PGP investment in project 1 was about \$780,000.

For discussion, the table below shows the projected costs of *Sensational Summerfruit* projects 1 and 2 (excluding the nutraceutical work). The actual Avocado PGP investment in market development is added below (NB their PGP was for 5 years).

Table 1 Comparisons of cost of consumer and market development work in the PGPs (\$000)

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Total
<i>Sensational Summerfruit</i>	Project 1	\$ 75	\$ 450	\$ 525	\$ 500	\$ 250	\$ 350	\$ 100	\$2,250
	Project 2	\$ 248	\$ 222	\$ 111	\$ 112	\$ 114	\$ 118	\$125	\$ 1,050
	Total per year	\$ 323	\$ 672	\$ 636	\$ 612	\$ 364	\$468	\$225	\$ 3,300
<i>Avocados Go Global</i>	5 year average investment			\$ 780	\$ 780	\$ 780	\$ 780	\$ 780	\$ 3,900
	Difference			\$ 144	\$ 168	\$ 416	\$ 312	\$ 555	\$1,595

The difference between the amounts is a *guide* to the additional funds that will be required in the programme for the requested in market development work streams. The total for the last 5 years is \$1,595,000.

It is noted that whereas the Avocado PGP programme is for one product, the summerfruit programme covers five fruit types. However, this does not mean that cost of the work will be five times greater. The summerfruit industry will look to leverage the in-market resources across all fruit types, since many exporters cover a number of fruit types.

Summerfruit Exporters committee investment in the programme

The panel is looking to see a firm commitment from the SEC/export partners to directly invest in the programme.

Whilst many exporters operate under different business models and have their own commercial focus, Summerfruit NZ believes the additional projects will be complimentary to all exporters and benefit the wider New Zealand summerfruit industry.

We have commenced an in-depth consultation with exporters and other stakeholders to move to a widely accepted commitment to directly invest in the market development activities.

The exporters are being consulted on the following matters:

- The proposed new workstreams (as above), noting that investment would only be made where opportunities were identified
- Potential for the required investment in the programme to be made from a PGP contribution collectible per kg fruit

- Exporters to have a representative on the Project Steering Committee developing and overseeing the projects
- The option to restructure SEC.
- We have commenced an in-depth consultation with exporters to move to a widely accepted commitment to directly invest in the market development activities. Exporters are being consulted on the new in market work streams proposed, how they might be funded through a fee collectible per kg fruit and how the Summerfruit Exporters Committee may be structured for its expanded role.

These matters are not trivial. Further discussion will take place with stakeholder over next couple of months to develop a broader consensus of how to move forward with these work streams and the investment.

Accordingly, we would like to address this particular matter with the IAP at the March 2019 meeting.

Focus on consumer engagement

The panel is looking to see direct consumer engagement rather than survey driven data insight.

In project 1 activity 1.1 has been refocused as *Consumer needs and drivers*.

In project 1 activity 1.2 has been refocused as *Targeting and delivering consumer value*.

These changes, as they roll out will address the advice to focus on actual consumer engagement.

Increased external investment for programme success

The panel is seeking a set of clearly defined KPIs which represent measurable indicators of increasing investment in the summerfruit industry supply chain and at different stages of development.

The projected increased external investment was outlined in figure 4 page 37 of the Business Case. Some potential KPIs to indicate this increased investment are discussed below. They have been chosen because they are measurable and indicate wider macro-economic activity in the industry and not just the outputs from this programme. (Note: these KPIs are additional to those in Table 8, page 49, which are KPIs for the end of the programme in 2025).

The increased investment KPIs are:

1. Number of tree orders from nurseries and year on year increase.
This KPI is a leading indicator. A multiplier factor could be developed to translate this into on orchard value, as orchard infrastructure and land use is related directly to the number of trees.
2. Uptake of new varieties.

Whilst this is related to # 1, it also indicates industry confidence in the potential for new markets.

3. Increasing packhouse capacity as evidenced by measure such as floor area and labour growth. The increased fruit volumes, as per #1, will require greater capability in packhouses.
4. Volumes of air freight vs sea freight for each fruit type.
This KPI measure the outcomes of the investment in the kinds of activities in Project 3: *Innovative packaging, packing, transport solutions*. This measure is quantitative and robust.
5. Industry statistics such as number of levy payers/growers and number of exporter registrations
These KPIs measure industry growth.
6. Export volumes of fruit
This is a final lag indicator.

Specific KPIs, milestones and stop/go decisions that are closely aligned with the investment progress and timetable have been added in the work plan in the Appendix. (KPIs = Project achievement measure in the work plan below).

Activities that will drive technology uptake and implementation

The panel is seeking clarity around what activities will drive technology uptake and implementation alongside the development of tools and materials.

Project 4 : *High performance orchards and improved genetic material* and Project 5: *Industry development* rely on uptake and implementation of the tools and material developed. As a principle, all information resulting from the project will be made available to all growers and investors, exporters, and marketers associated with the New Zealand summerfruit industry. Growers and investors will be surveyed to determine how best to communicate and transfer information/recommendations

The following activities will be used to ensure uptake and implementation.

1. There will be regular consultation with growers at key stages during the growing season.
A specific industry extension programme will be developed at the inception of project 4.
2. All orchard development work will be done ON orchards themselves and not at a research station. This means that growers can see directly how the innovations are applicable to them and can understand the economic costs and value.
3. Benchmarking. On orchard work lends itself to benchmarking for the industry, which is a powerful tool for industry learning and improvement.

4. Discussion groups/clusters of interest around particular innovation processes will be set up. Because the industry is largely based in two areas: Hawkes Bay and Central Otago, it is not hard to organise discussions groups and programmes to drive uptake of information. This is also tied in with point 1, as field days can be organised on orchards.
5. The following extension mechanisms will be used:
 - SummerGreen Technology workshops organised by dedicated Summerfruit NZ SummerGreen Facilitators in both Hawke's Bay and Central Otago.
 - SummerGreen electronic updates (web updates, e-mails as needed)
 - Prunings (Summerfruit NZ electronic newsletter)
 - Summerfruit NZ Annual Conference
 - Summerfruit NZ Annual Research Report
 - Publication of findings on the Summerfruit NZ website.
6. Summerfruit NZ will further systematically develop its information portal for sharing information. Webinars will also be explored as a mechanism for industry change.
7. The new staff that will be employed as project managers within the programme will also be responsible for the uptake of the information by industry participants into new practices.

In Project 5 : *Industry development*,

- Activity 5.4.4 is the development of a support programme for new investment and this programme will actively seek and support new investment.
- Activity 5.5 New technology uptake also involves trialling new models of industry enhanced adoption, and these will be implemented.

Additional text has been added to make it explicit that Summerfruit NZ is seeking implementation and adoption and not just development.

These activities will lead to two specific outcomes in the OLM:

- New industry systems for data management and benchmarking
- An innovative and informed industry developed for long term growth.

Appendix

Summary table of KPIs

Table 1 Key performance indicators from the PGP at end of programme 2025 (new KPI in green)

KPI	PGP scenario
New varieties with consistent consumer appeal	4 New apricot varieties in market 2 New peach and nectarine varieties in market 1 New plum variety in market
High performance production systems	Benefits established and change over occurring to deliver 1.5-2.0 X volume of fruit
New markets opened	Market penetration approximately 12 % in existing markets and up to 25% in some new markets. Between 3 -4 % market growth in New Zealand market. New sales models
Supply chain delivers quality fruit with velocity	New packaging for direct to consumer supply New packhouse technology identified Improved logistic systems
Innovative and accomplished industry	Industry transformation: <ul style="list-style-type: none"> • new technology and systems • industry benchmarks itself • new growers and significant capital investment Industry is more resilient and sustainable
Increased returns	Industry revenue increased 1.5X (at 2025)
<u>Increased industry and external investment into growth and infrastructure</u>	<u>This will be measured by the following key indicators.</u> <ul style="list-style-type: none"> • <u>Number of tree orders from nurseries and year on year increase.</u> • <u>Uptake of new varieties.</u> • <u>Increasing packhouse capacity as evidenced by measure such as floor area and labour growth.</u> • <u>Volumes of air freight vs sea freight for each fruit type.</u> • <u>Industry statistics such as number of levy payers/growers and number of exporter registrations</u> • <u>Export volumes of fruit</u>

1.1. The Programme: Work plan and milestones

Programme: Outcome Summary

Intermediate Outcome : Key Indicators of Success

IO Statement	<p>A summary of the programme and what it is aiming to achieve. Ideally, someone new to the programme should be able to pick up this section of the document to get an overview of the programme and the key milestones throughout.</p> <p>Summerfruit is a portfolio of five fruits, (apricots, cherries, nectarines, peaches, and plums) grown mainly in Central Otago and Hawke’s Bay by 280 growers, with 35 export packhouses, 25 exporters and 5 mainly New Zealand wholesalers. Summerfruit NZ is the industry organisation.</p> <p>Through market research and strategic planning, Summerfruit NZ has identified that there is an opportunity to deliver to consumers in export markets and New Zealand healthy fruit with the right eating experience and with quality, freshness and New Zealand provenance. However, this is hard because summerfruit are difficult to produce with consistent volume and quality, have a short shelf life and require packaging, and fast logistics and transport. The industry has recognised the importance of taking these market led opportunities to drive significant new growth. Summerfruit NZ’s bold goal is to get unrelenting and unquestioned quality fruit direct from the tree to the consumer with velocity.</p> <p>Success will be that all New Zealand summerfruit are positioned as high value fruit with target consumers, leading to a larger, profitable and sustainable industry. Other indicators of success are:</p> <p>The successful delivery of this programme will be measured by the following major outcomes:</p> <p><u>Economic</u></p> <ol style="list-style-type: none">1. An increase in the value of the industry to \$465 million by 2035, compared to a current value of \$112 million, (and a counterfactual value of \$162 million at 2035) and increased financial returns for all parts of the summerfruit industry (growers, packhouses, exporters, marketers)2. Benefit to New Zealand through an increase of GDP of \$150 million. <p><u>Spill-over</u></p> <ol style="list-style-type: none">3. The fast and successful adoption of innovation and new technology all along the value chain and particularly in packaging, packing and transport4. Development of new employment opportunities in IT, science and engineering to service an increasingly technology driven industry throughout the supply chain. <p><u>Sustainability</u></p> <ol style="list-style-type: none">5. A major increase in consistent production and quality through the use of more high performance orchard systems with environmental benefits6. Expansion of premium and targeted export markets and greater New Zealand market <p>Key determining factors outside of the control of the programme:</p> <ol style="list-style-type: none">7. Exchange rate fluctuation
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8. Market access changes
9. Significant land use changes
10. Adverse weather events impacting on production
11. Biosecurity incursions

Increased industry and external investment into growth and infrastructure during the programme and after its completion will be measured by the following key indicators.

1. Number of tree orders from nurseries and year on year increase.
This KPI is a leading indicator. A multiplier factor could be developed to translate this into on orchard value, as orchard infrastructure and land use is related directly to the number of trees.
2. Uptake of new varieties.
Whilst this is related to # 1, it also indicates industry confidence in the potential for new markets.
3. Increasing packhouse capacity as evidenced by measure such as floor area and labour growth.
4. Volumes of air freight vs sea freight for each fruit type.
This KPI measure the outcomes of the investment in the kinds of activities in Project 3: *Innovative packaging, packing, transport solutions*. This measure is quantitative and robust.
5. Industry statistics such as number of levy payers/growers and number of exporter registrations
These KPIs measure industry growth.
6. Export volumes of fruit
This is a final lag indicator.

Start Date	1/03/2019
End Date	31/02/2026
Leader	PGP Programme Manager

Objective

Objective: Programme Management

Objective Description	<p>Effective programme management through appropriate resourcing and strategic management to ensure: timely and within budget delivery to a high standard of outcomes from the programme and contractual requirements; reliable cost accounting and financial reporting; effective management of all contracted suppliers and services; appropriate and effective communication with all stakeholders and with MPI.</p>
Objective Achievement Measures	<ol style="list-style-type: none"> 1. Programme management systems: systems and templates for forecasting and recording delivery, financial management and subcontracting are developed and communicated to programme participants by 28 February 2019 2. Process established to record and track additional costs (in-kind) by 31 August 2019. 3. Partnership financial contributions for programme activities have been widely canvassed and MoUs developed with confirmed partners by 31 August 2019. 4. Annual plan approved by Programme Steering Group by 30 June each year. 5. Variations relating to annual plan approved and incorporated into schedule 5 of the PGP contract by 31 August each year. 6. Cashflow forecast: updated year end and programme forecast approved by the PSG quarterly. 7. Reporting: reports are made on a quarterly basis to the PSG and MPI. 8. Meetings: PSG meetings are held quarterly. 9. Programme outcomes reviewed annually as part of the annual plan update process. 10. Independent Programme Reviews: two independent reviews of the programme to be held by Dec 31 2022 and Dec 31 2024.
Start Date	<p>1 September 2018</p>
End Date	<p>31 August 2025</p>
Leader	<p>Programme Manager</p>
Linkages	<p>Projects 1-5: Project Management supports all activities</p>

Project 1 : Understanding consumers

Project 1: Understanding consumers	
Project description	This project will develop a sophisticated understanding of what creates high value for consumers of fresh fruit in target Asian and New Zealand markets in order to be able to provide the fruit the consumer wants.
Project achievement measures	<ol style="list-style-type: none"> 1. Consumer needs, drivers and preferences determined in target Asian markets and New Zealand market 2. Consumer trials for fruits in target markets 3. New targeted market segments identified in New Zealand and target markets 4. Emerging purchasing channels are well understood and new sales models developed 5. Consumer requirements for packaging identified 6. Nutraceutical opportunity well defined
Start date	1 September 2018
End date	30 August 2025
Leader	

Activity 1 1: ~~Demographics~~ **Consumer needs and drivers**

Activity description	In this activity we will use consumer research in both New Zealand and target Asian countries to carry out analysis into the purchasing preferences and habits of consumers.
Activity achievement measures	<p>Consumer preferences determined in New Zealand market</p> <p>Consumer preferences determined in current export markets</p> <p>Consumer preferences determined in new export markets</p>
Start date	01/09/2018
End date	<p>30/08/2025</p> <p>01/08/2020 Stop: Go – PSG to evaluate progress and approve next tranche of work</p> <p>01/08/2020 Stop: Go – PSG to assess additional exporter investment and approve next tranche of work</p>

Leader	
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Milestone 1.1.1:

Milestone description	We will assess consumer preferences in the New Zealand market
Achievement measures	Consumer preferences determined in New Zealand market
Start date	01/09/2018
End date	Reporting on 1/08 2021 and 1/08 2023 and 1/08/2025
Links to other milestones	Contributes to milestones in 1.3,1.4, 2.3, 2.4

Milestone 1.1.2:

Milestone description	We will assess consumer preferences in current export markets to build demand
Achievement measures	Consumer preferences determined in current export markets
Start date	01/09/2019
End date	Reporting on 1/08 2022 and 1/08 2024
Links to other milestones	Contributes to milestones in 1.3,1.4, 2.3, 2.4

Milestone 1.1.3:

Milestone description	We will assess consumer preferences in new export markets to build demand
Achievement measures	Consumer preferences determined in new export markets

Start date	01/09/2019
End date	Reporting on 1/08 2022 and 1/08 2024
Links to other milestones	Contributes to milestones in 1.3,1.4, 2.3, 2.4

Activity 1.2: ~~New market segments~~ Targeting and delivering consumer value

Activity description	In this activity we will identify key high return market segments that may be outside current target markets e.g. for health benefits and nutraceuticals.
Activity achievement measures	New market segments identified
Start date	1/09/2019
End date	1/06/2024 <i>01/08/2020 Stop: Go – PSG to evaluate progress and focus on particular segments</i> <i>01/08/2020 Stop: Go – PSG to assess additional exporter investment and approve next tranche of work</i> <i>01/08/2021 Stop: Go – PSG to evaluate and further refine or open up new markets</i> <i>01/08/2021 Stop: Go - PSG to re-forecast projected export volumes and values and modified outcomes developed as appropriate as more information is known.</i>
Leader	

Milestone 1.2.1:

Milestone description	Investigate new high return markets in New Zealand
Achievement measures	New high return market segments identified in New Zealand
Start date	1/09/2019
End date	1/08/2022

Links to other milestones	Dependent on milestones in 1.1, 1.2 and 1.3 Contributes to milestones in activity 2.3
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Milestone 1.2.2:

Milestone description	Investigate new high return markets in current export markets
Achievement measures	New market segments identified in current export markets
Start date	1/09/2019
End date	1/08/2022
Links to other milestones	Dependent on milestones in 1.1, 1.2 and 1.3 Contributes to milestones in activity 2.3

Milestone 1.2.3:

Milestone description	Investigate new high return markets in new export markets
Achievement measures	New market segments identified in new export markets
Start date	1/09/2019
End date	1/08/2024
Links to other milestones	Dependent on milestones in 1.1, 1.2 and 1.3 Contributes to milestones in activity 2.3

Activity 1.3: Fruit acceptance

Activity description	We will determine the consumer acceptance and weighting of sensory, visual, cosmetic and fruit size attributes. We will also investigate the attitudes to health/nutritional benefits of summerfruit.
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Activity achievement measures	Consumer trials carried out fruits in target markets
Start date	1/09/2019
End date	1/08/2023 <i>01/08/2020 Stop: Go – PSG to evaluate progress in New Zealand market</i> <i>01/08/2020 Stop: Go – PSG to assess additional exporter investment and approve next tranche of work</i> <i>01/08/2021 Stop: Go – PSG to evaluate progress in trials with apricots and confirm or change countries</i> <i>01/08/2021 Stop: Go – PSG to evaluate progress in trials with peaches/nectarines and confirm or change countries</i>
Leader	

Milestone 1.3.1:

Milestone description	Consumer trials for fruits in New Zealand market
Achievement measures	Fruit types identified for increased consumer satisfaction
Start date	1/09/2019
End date	1/08/2022
Links to other milestones	Dependent on activity 4.2 Contributes to milestones in 1.2,1.4, 2.3, 2.4

Milestone 1.3.2:

Milestone description	Consumer trials with apricots in four countries
Achievement measures	Fruit types identified for increased consumer satisfaction

Start date	1/09/2020
End date	1/09/2023
Links to other milestones	Dependent on activity 4.2... Contributes to milestones in 1.2,1.4, 2.3, 2.4

Milestone 1.3.3:

Milestone description	Consumer trials with peaches and nectarines in three countries
Achievement measures	Fruit types identified for increased consumer satisfaction
Start date	1/09/2020
End date	1/09/2023
Links to other milestones	Dependent on activity 4.2... Contributes to milestones in 1.2,1.4, 2.3, 2.4

Activity 1 4: Purchasing channels

Activity description	Investigation of the changing purchasing channels and the impact or opportunities they create
Activity achievement measures	Emerging market channels are well understood and used New sales models developed <i>01/08/2021 Stop: Go – PSG to assess results from purchasing channels to determine how to progress trials</i> <i>01/08/2023 Stop: Go – PSG to evaluate progress in trials before commencing industry wide trials</i>
Start date	1/09/2019
End date	1/06/2025

Leader	
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Milestone 1.4.1:

Milestone description	Assessment of new purchasing channels in New Zealand
Achievement measures	Emerging market channels are well understood
Start date	1/09/2019
End date	1/08/2022
Links to other milestones	Dependent on milestones in activity 1.1, 1.2 and 1.3 Contributes to activity 1.5,2.3

Milestone 1.4.2:

Milestone description	Assessment of new purchasing channels in export markets
Achievement measures	Emerging export market channels are well understood
Start date	1/09/2019
End date	1/08/2024
Links to other milestones	Dependent on milestones in activity 1.1, 1.2 and 1.3 Contributes to activity 1.5,2.3

Milestone 1.4.3:

Milestone description	Trialling new channels in two markets with two summerfruit types
Achievement measures	New sales models developed

Start date	1/09/2021
End date	1/08/2025
Links to other milestones	Dependent on milestones in activity 1.1, 1.2 and 1.3 Contributes to activity 1.5,2.3

Milestone 1.4.4:

Milestone description	Adoption of industry wide direct to consumer sales
Achievement measures	Emerging market channels and sales models used successfully
Start date	1/09/2021
End date	1/06/2025
Links to other milestones	Dependent on milestones in activity 1.1, 1.2 and 1.3 Contributes to activity 1.5,2.3

Activity 1 5: Packaging requirements

Activity description	In this activity we will work closely with the activities in project 3 (Innovative packaging, packing and transport) to identify consumer packaging and presentation requirements.
Activity achievement measures	Consumer requirements for packaging identified in New Zealand and range of summerfruit and in the prioritised export markets Customer satisfaction increased.
Start date	1/09/2018
End date	1/08/2025 <i>01/08/2019 Stop: Go – PSG to assess results from initial studies to determine how to progress wider studies</i> <i>01/08/2021 Stop: Go – PSG to evaluate progress in trials with new packaging</i>

	<i>01/08/2021 Stop: Go – PSG to evaluate progress in trials</i>
Leader	

Milestone 1.5.1:

Milestone description	Study undertaken on consumer packaging in New Zealand for all summerfruit
Achievement measures	New Zealand consumer requirements for packaging identified for all summerfruit.
Start date	1/09/2018
End date	1/08/2020
Links to other milestones	Contributes to activities in 2.3 and 2.6 ... Associated with milestones in activities 3.2 and 3.3

Milestone 1.5.2:

Milestone description	Packaging preferences in preferred export markets and summerfruit
Achievement measures	Greater understanding of consumers response to types of packaging for combinations of summerfruit and priority markets
Start date	1/09/2018
End date	1/06/2021, 1/08/2013, 1/08/2015
Links to other milestones	Contributes to activities in 2.3 and 2.6 ... Associated with milestones in activities 3.2 and 3.3

Milestone 1.5.3:

Milestone description	Consumer responses to new packaging in New Zealand
Achievement measures	New packaging trialled with New Zealand consumers
Start date	1/09/2019
End date	1/08/2021, 1/08/2024
Links to other milestones	Contributes to activities in 2.3 and 2.6 ... Associated with milestones in activities 3.2 and 3.3

Milestone 1.5.4:

Milestone description	Consumer responses to new packaging in export markets
Achievement measures	New packaging trialled with consumers in selected export markets
Start date	1/09/2019
End date	1/08/2022
Links to other milestones	Contributes to activities in 2.3 and 2.6 ... Associated with milestones in activities 3.2 and 3.3

Activity 1 6: Nutraceutical potential

Activity description	The nutraceutical potential of summerfruit will be evaluated.
Activity achievement measures	Information to determine how to focus on health/nutritional benefits Nutraceutical opportunity critically determined and taken up

Start date	1/09/2018
End date	1/06/2023 <i>01/08/2019 Stop: Go – PSG to assess results from initial studies on composition before carrying out trials</i> <i>01/08/2021 Stop: Go – PSG to evaluate progress in trials before product development</i>
Leader	

Milestone 1.6.1: Nutraceutical potential

Milestone description	Study on nutraceutical composition relevant to consumers health perceptions
Achievement measures	Nutraceutical opportunity well defined
Start date	1/09/2018
End date	1/08/2020
Links to other milestones	Contributes to milestones in activity 4.2 Associated with milestones in activity 5.4

Milestone 1.6.2:

Milestone description	Trials on efficacy commenced
Achievement measures	Efficacy defined
Start date	1/09/2019
End date	1/08/2021
Links to other milestones	Contributes to milestones in activity 4.2 Associated with milestones in activity 5.4

Milestone 1.6.3:

Milestone description	Product development
Achievement measures	Product development initiated
Start date	1/09/2020
End date	1/08/2023
Links to other milestones	Contributes to milestones in activity 4.2 Associated with milestones in activity 5.4

Project 2 : New market development

Project 2 : New market development	
Project Description	This project will work closely with project 1 to ensure market development activities align with the information on consumers and the priority list of markets.
Project Achievement Measures	<ol style="list-style-type: none"> 1. List of target markets for specific fruits 2. Analysis of competitors value propositions in selected markets 3. Strategies developed for New Zealand market and export markets 4. Market access is achieved in these target markets 5. Traceability enables market development 6. Emerging market channels are well understood and opened up 7. In market resourcing and in kind to support market development identified.
Start Date	1 September 2018
End Date	30 August 2025
Leader	

Activity 2.1 Market requirements and conditions

Activity Description	<p>In this activity we will analyse market requirements and conditions for:</p> <ul style="list-style-type: none"> • Current markets and access to ensure we are exploiting all opportunities e.g. Hong Kong, Singapore, Thailand, Taiwan. • Potential new markets such as Apricots for China, which will require substantial development. • New markets will be prioritised.
Activity Achievement Measures	List of target markets for specific fruits prioritised
Start Date	01/09/2018
End Date	01/08/2021 <i>01/08/2021 Stop: Go – PSG to evaluate progress and approve next tranche of work</i>
Leader	

Milestone 2.1.1:

Milestone description	Review current markets for further opportunities
Achievement measures	New opportunities identified Stop: Go – PSG to approve
Start date	01/09/2018
End date	01/08/2020
Links to other milestones	Contributes to milestones in activity 2.2, 2.3, 2.4 and 2.6...

Milestone 2.1.2

Milestone description	Identify potential new markets
Achievement measures	List of target markets for specific fruits
Start date	01/09/2019
End date	01/08/2021
Links to other milestones	Contributes to milestones in activity 2.2, 2.3, 2.4 and 2.6

Milestone 2.1.3

Milestone description	Prioritise new markets
Achievement measures	New markets and fruits prioritised
Start date	01/09/2019
End date	01/08/2021

Links to other milestones	Dependent on milestone 2.1.1 and 2.1.2 and milestones in activity 1.3 Contributes to milestones in activity 2.3, 2.4 and 2.6
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Activity 2.2: Competitor analysis

Activity Description	We will develop a full understanding of competitors, including their production systems, in the identified markets and fruits.
Activity Achievement Measures	Analysis of competitors value propositions in priority markets and for fruits
Start Date	01/09/2019
End Date	01/08/2021
Leader	

Milestone 2.2.1

Milestone description	Identification of competitors in priority markets and fruits for analysis
Achievement measures	Lists of competitors and issues
Start date	01/09/2019
End date	01/08/2021
Links to other milestones	Dependent on activity 2.1 Contributes to activities 2.3, 2.4 and 2.6...

Milestone 2.2.2

Milestone description	Full competitor analysis and production systems
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Achievement measures	Competitors well understood
Start date	01/09/2019
End date	01/08/2021
Links to other milestones	Dependent on activity 2.1 Contributes to activities 2.3, 2.4 and 2.6...

Activity 2.3: Strategies for new markets

Activity Description	In this activity we will identify strategies for new markets, both in Asia and New Zealand. We will identify opportunities to exploit unsupplied or underdeveloped markets
Activity Achievement Measures	Report on opportunities and strategies
Start Date	01/09/2019
End Date	01/08/2021 <i>01/08/2020 Stop: Go – PSG to evaluate progress and approve next tranche of work</i> <i>01/08/2021 Stop: Go - PSG to re-forecast projected export volumes and values and modified outcomes developed as appropriate as more information is known.</i>
Leader	

Milestone 2.3.1

Milestone description	Strategies for <i>New Zealand</i> markets/fruits
Achievement measures	Information developed for new strategies for New Zealand market and fruits
Start date	01/09/2019

End date	01/08/2021
Links to other milestones	Dependent on milestones in activities 2.1 and 2.2 Contributes to milestones in activity 1.2, 2.4 and 2.6

Milestone 2.3.2

Milestone description	Strategies for <i>export</i> markets/fruits
Achievement measures	Information developed for new strategies for export market and fruits
Start date	01/09/2019
End date	01/08/2021
Links to other milestones	Dependent on milestones in activities 2.1 and 2.2 Contributes to milestones in activity 1.2, 2.4 and 2.6

Activity 2.4: Opening new markets

Activity Description	We will prioritise the opening of new markets for specific fruits. <u>In market work will be resourced and undertaken.</u> This will be informed by the time frames for access. We will work closely with Government departments such as MPI and MFAT to have clear information on market access for prioritisation.
Activity Achievement Measures	Market access issues are identified Market trials are carried out
Start Date	01/09/2018
End Date	01/08/2024 01/09/2021 Stop: Go – PSG to evaluate progress prior to SEC in market contribution commencing

Leader	
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Milestone 2.4.1

Milestone description	We will identify the market access issues that will limit the exports.
Achievement measures	Market access issues identified
Start date	01/09/2018
End date	01/08/2020
Links to other milestones	Dependent on milestones in activities 2.1, 2.2, 2.3 Contributes to activities in 1.2,1.3, 2.6 Associated with activity 5.1

Milestone 2.4.2

Milestone description	Market trials
Achievement measures	Market trials are carried out Market access is achieved in these target markets
Start date	01/09/2020
End date	01/08/2024
Links to other milestones	Dependent on milestones in activities 2.1, 2.2, 2.3 Contributes to activities in 1.2,1.3, 2.6 Associated with activity 5.1

Milestone 2.4.3

Milestone description	<u>Develop in-market Summerfruit NZ story</u>
Achievement measures	<u>Brand collateral developed for use by exporter brands.</u> <u>In market resource committed.</u>
Start date	<u>01/09/2021</u>
End date	<u>01/08/2025</u>
Links to other milestones	<u>Dependent on milestones in activities 2.1, 2.2, 2.3</u> <u>Contributes to activities in 1.2,1.3, 2.6</u> <u>Associated with activity 5.1</u>

Milestone 2.4.4

Milestone description	<u>In market development in key markets</u>
Achievement measures	<u>In market resource committed.</u>
Start date	<u>01/09/2022</u>
End date	<u>01/08/2025</u>
Links to other milestones	<u>Dependent on milestones in activities 2.1, 2.2, 2.3</u> <u>Contributes to activities in 1.2,1.3, 2.6</u> <u>Associated with activity 5.1</u>

Activity 2.5: Traceability systems

Activity Description	Develop traceability systems
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Activity	We will develop systems to prove the origin and traceability of the products, because the New Zealand provenance of the fruit, its quality and environmental sustainability is important
Achievement Measures	
Start Date	01/09/2019
End Date	01/08/2022
Leader	

Milestone 2.5.1

Milestone description	Identify requirements for traceability
Achievement measures	Traceability requirements and potential systems for delivery identified
Start date	01/09/2019
End date	01/08/2020
Links to other milestones	Contributes to milestones in activities 1.3, 1.4, 3.1, 3.4 and 5.5

Milestone 2.5.2

Milestone description	Trial new systems
Achievement measures	New traceability systems identified in industry trials
Start date	01/09/2020
End date	01/08/2022
Links to other milestones	Contributes to milestones in activities 1.3, 1.4, 3.1, 3.4 and 5.5

Activity 2.6: Emerging market channels

Activity Description	Responding to changing requirements of emerging marketing channels e.g. online sales direct to consumers
Activity Achievement Measures	Emerging market channels are well understood Plans for new market channels developed Industry trials carried out
Start Date	01/09/2018
End Date	01/08/2025 <i>01/08/2020 Stop: Go – PSG to evaluate progress and approve next tranche of work</i>
Leader	

Milestone 2.6.1

Milestone description	Assess potential and requirements of new market channels
Achievement measures	Emerging market channels are well understood
Start date	01/09/2019
End date	01/06/2021
Links to other milestones	Dependent on milestones 2.1, 2.2 2.3 2.4 Contributes to milestone 5.4

Milestone 2.6.2

Milestone description	Develop industry plan for new market channels
Achievement measures	Plans for new market channels developed

Start date	01/09/2019
End date	01/08/2022
Links to other milestones	Dependent on milestones 2.1, 2.2 2.3 2.4 Contributes to milestone 5.4

Milestone 2.6.3

Milestone description	Develop industry alternative channel trials
Achievement measures	Industry trials undertaken
Start date	01/09/2020
End date	01/08/2022, and 01/08/2025
Links to other milestones	Dependent on milestones 2.1, 2.2 2.3 2.4 Contributes to milestone 5.4

Project 3 : Innovative packaging, packing, transport solutions

Project 3 : Innovative packaging, packing, transport solutions	
Project description	This project will look across the supply chain and create the options needed for transporting the fruit to the target markets with velocity.
Project achievement measures	<ol style="list-style-type: none"> 1. New transport and logistics systems identified 2. Innovative packaging 3. Innovative packing systems 4. In market logistics systems
Start date	01/09/2018
End date	01/08/2025
Leader	

Activity 3.1 Transport and logistics systems

Activity Description	Identifying air and sea freight systems for moving a larger crop while still maintaining highest quality. There will be a focus on the cool chain.
Activity Achievement Measures	<p>High volumes of fruit delivered to new markets with velocity</p> <p>New transport and logistics systems</p>
Start Date	01/09/2018
End Date	<p>01/08/2025</p> <p><i>01/08/2020 Stop: Go – PSG to evaluate progress and approve next tranche of work</i></p>
Leader	

Milestone 3.1.1:

Milestone Description	Current industry practices and gap analysis
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Achievement Measures	Report on practices and gaps
Start date	01/09/2018
End Date	01/08/2020
Links to other Milestones	Contributes to milestones in activities 5.4 and 5.5 Associated with milestones in activities 2.4, 2.5 2.6

Milestone 3.1.2:

Milestone Description	Option analysis for logistics to range of countries
Achievement Measures	Effective and commercially achievable options identified
Start date	01/09/2019
End Date	01/08/2021
Links to other Milestones	Contributes to milestones in activities 5.4 and 5.5 Associated with milestones in activities 2.4, 2.5 2.6

Milestone 3.1.3:

Milestone Description	Trials for optimising new systems
Achievement Measures	New transport and logistics systems achieved
Start date	01/09/2020
End Date	01/06/2025
Links to other Milestones	Contributes to milestones in activities 5.4 and 5.5 Associated with milestones in activities 2.4, 2.5 2.6

Activity 3.2 Innovative packaging

Activity Description	In this activity we will carry out studies of consumer requirements for packs in direct to consumer marketing. New packaging will be designed, in tandem with the work in activity 3.3 below. Large scale industry trials will be carried out.
Activity Achievement Measures	Innovative packaging that meets consumer requirements and delivers fruit with highest quality
Start Date	01/09/2019
End Date	01/08/2025 <i>01/08/2020 Stop: Go – PSG to evaluate progress and approve plan for industry trials</i>
Leader	

Milestone 3.2.1:

Milestone Description	Study of consumer requirements
Achievement Measures	Packaging requirements of consumers in New Zealand and export markets well understood
Start date	01/09/2018
End Date	01/08/2020
Links to other Milestones	Dependent on milestones in activity 3.1 Contributes to milestones in activity 3.3 Associated with milestones in activities 5.4 and 5.5

Milestone 3.2.2:

Milestone Description	New systems design
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Achievement Measures	New packaging configurations will be designed for a range of fruit types and markets
Start date	01/09/2019
End Date	01/08/2021
Links to other Milestones	Dependent on milestones in activity 3.1 Contributes to milestones in activity 3.3 Associated with milestones in activities 5.4 and 5.5

Milestone 3.2.3:

Milestone Description	Industry trials
Achievement Measures	Range of innovative packaging identified and adopted by industry
Start date	01/09/2020
End Date	01/08/2025
Links to other Milestones	Dependent on milestones in activity 3.1 Contributes to milestones in activity 3.3 Associated with milestones in activities 5.4 and 5.5

Activity 3.3 Innovative packing systems

Activity Description	In this activity we will focus on analysing the requirements and the development of innovative handling and packaging technologies. This will involve consideration of robotic system in pack house. New systems will be designed and industry trails carried out.
Activity Achievement Measures	Innovative packing systems that are efficient and deliver fruit with highest quality and shelf life
Start Date	01/09/2019

End Date	01/08/2025 <i>01/08/2020 Stop: Go – PSG to evaluate progress and approve plan for industry trials</i>
Leader	

Milestone 3.3.1:

Milestone Description	Current industry practices and gap analysis
Achievement Measures	Report on practices and gaps
Start date	01/09/2018
End Date	01/08/2020
Links to other Milestones	Dependent on milestones in activities 3.1, 3.2... Contributes to milestones in activities 5.4 and 5.5... Associated with milestones in activity 4.1

Milestone 3.3.2:

Milestone Description	New systems design
Achievement Measures	New packing systems will be designed for a range of fruit types and markets
Start date	01/09/2018
End Date	01/08/2021
Links to other Milestones	Dependent on milestones in activities 3.1, 3.2... Contributes to milestones in activities 5.4 and 5.5... Associated with milestones in activity 4.1

Milestone 3.3.3:

Milestone Description	Industry trials
Achievement Measures	Range of innovative packing systems and technologies identified and adopted by industry
Start date	01/09/2020
End Date	01/08/2025
Links to other Milestones	Dependent on milestones in activities 3.1, 3.2... Contributes to milestones in activities 5.4 and 5.5... Associated with milestones in activity 4.1

Activity 3.4 In market logistics systems

Activity Description	Understanding internal systems and limitations within markets In this work we will develop an understanding internal systems and limitations within markets for prioritised markets and fruits. New systems will be designed and industry trials carried out.
Activity Achievement Measures	New in market logistics systems optimised and adopted.
Start Date	01/09/2019
End Date	01/08/2025 <i>01/08/2020 Stop: Go – PSG to evaluate progress and approve plan for industry trials</i>
Leader	

Milestone 3.4.1:

Milestone Description	Study of in-market systems for prioritised markets and fruits
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Achievement Measures	Current positions identified for the industry
Start date	01/09/2019
End Date	01/08/2021
Links to other Milestones	Dependent on milestones in activities 3.1, 3.2 and 3.3... Contributes to milestones in activities 5.4 and 5.5..... Associated with milestones in activities 2.5 and 4.1...

Milestone 3.4.2:

Milestone Description	New systems design
Achievement Measures	New in market systems will be designed for a range of fruit types and markets
Start date	01/09/2019
End Date	01/08/2022
Links to other Milestones	Dependent on milestones in activities 3.1, 3.2 and 3.3... Contributes to milestones in activities 5.4 and 5.5..... Associated with milestones in activities 2.5.and 4.1.

Milestone 3.4.3:

Milestone Description	Industry trials
Achievement Measures	Range of innovative in market systems identified and adopted by industry
Start date	01/09/2019
End Date	01/08/2025

**Links to other
Milestones**

Dependent on milestones in activities 3.1, 3.2 and 3.3...

Contributes to milestones in activities 5.4 and 5.5.....

Associated with milestones in activities 2.5.and 4.1

Project 4 : High performance orchards and improved genetic material

Project 4 : High performance orchards and improved genetic material	
Project description	This project will investigate and optimise the practices needed to produce consistent, high yields and quality. New genetic material will be taken through to commercial production.
Project achievement measures	<ol style="list-style-type: none"> 1. Intensification of production systems 2. Development and marketing of new varieties delivering consistent consumer appeal 3. Sustainable control of pests and diseases with biosecurity readiness programmes for key pests, diseases and viruses 4. Consistent and reliable fruit set 5. Uptake of new varieties.
Start date	1/09/2018
End date	31/08/2025
Leader	

Activity 4.1 High performance orchards and improved genetic material

Activity Description	The activity will develop high performance growing orchards systems to result in a paradigm shift in maximising consistent yields and quality.
Activity Achievement Measures	Intensification of production systems
Start Date	01/09/2018
End Date	31/08/2025
Leader	

Milestone 4.1.1:

Milestone Description	Production prediction models developed
Achievement Measures	<ol style="list-style-type: none">1. Modelling completed of new planting systems for peaches, nectarines and plums to enable increased production of consistent quality product2. Planting system developed to achieve increased production levels and consistent quality.
Start date	01/09/2018
End Date	31/08/2020
Links to other Milestones	Contributes to milestones in activity 4.3, 4.4, 5.2, 5.3 Associated with milestones in activity 4.2 and 5.5

Milestone 4.1.2:

Milestone Description	High performance orchards developed
Achievement Measures	<ol style="list-style-type: none">1. New precision management techniques developed for new summerfruit planting systems enabling the generation of quantitative fruit size and yield prediction metrics/algorithms2. Artificial spur extinction adapted for each fruit type for precision management of crop load3. Fruit maturity and quality indices developed that supplement current methods
Start date	01/09/2020
End Date	31/08/2025
Links to other Milestones	Contributes to milestones in activity 4.3, 4.4, 5.2, 5.3 Associated with milestones in activity 4.2 and 5.5

Milestone 4.1.3:

Milestone Description	Advisory-style expert support for commercial scale high performance planting systems developed
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Achievement Measures	1. Development of hubs for continuous education/uptake by summerfruit producers completed
Start date	01/09/2019
End Date	31/08/2025
Links to other Milestones	Contributes to milestones in activity 4.3, 4.4, 5.2, 5.3 Associated with milestones in activity 4.2 and 5.5

Activity 4.2 Bringing forward genetic material

Activity Description	Bringing forward new genetic material to better meet market requirements
Activity Achievement Measures	1. The introduction of new improved elite summerfruit selections meeting market demands for commercialisation
Start Date	01/09/2018
End Date	31/08/2025 <i>Annual Stop: Go – PSG to evaluate progress and approve plan for taking selections forward</i>
Leader	

Milestone 4.2.1:

Milestone Description	Evaluation of advanced apricot, nectarine, peach and plum selections completed.
Achievement Measures	1. Initial evaluation completed for <ul style="list-style-type: none"> 1.1. Eating quality 1.2. Brix 1.3. Pressure 1.4. Colour/cosmetics 1.5. Weight/size 1.6. Storage 2. Selections for elite evaluation identified

Start date	01/09/2018
End Date	31/08/2025
Links to other Milestones	<p>Dependent on milestones in activity 4.1 ...</p> <p>Contributes to milestones in activity 1.1 and 1.2, ...</p> <p>Associated with milestones in activity 2.1, 2.3, 2.6, 5.2, 5.4 and 5.5...</p>

Milestone 4.2.2:

Milestone Description	Commercialisation potential identified
Achievement Measures	<ol style="list-style-type: none"> 1. Completion of evaluation for potential commercialisation <ol style="list-style-type: none"> 1.1. Eating quality 1.2. Brix 1.3. Pressure 1.4. Colour/cosmetics 1.5. Weight/size 1.6. Storage 1.7. Ethylene production 1.8. Crop load 1.9. Packaging and handling ability 1.10. Acid content 2. 6 selections identified for commercialisation
Start date	01/09/2018
End Date	31/08/2025
Links to other Milestones	<p>Dependent on milestones in activity 4.1 ...</p> <p>Contributes to milestones in activity 1.1 and 1.2, ...</p> <p>Associated with milestones in activity 2.1, 2.3, 2.6, 5.2, 5.4 and 5.5...</p>

Milestone 4.2.3:

Milestone Description	Evaluation of tree health and tree form for elite selections
Achievement Measures	1. Growth habit identified 2. Susceptibility to diseases identified
Start date	01/09/2018
End Date	31/08/2025
Links to other Milestones	Dependent on milestones in activity 4.1 ... Contributes to milestones in activity 1.1 and 1.2, ... Associated with milestones in activity 2.1, 2.3, 2.6, 5.2, 5.4 and 5.5...

Milestone 4.2.4:

Milestone Description	Consumer sensory evaluation of elite selections
Achievement Measures	1. Laboratory sensory evaluation completed
Start date	01/09/2018
End Date	31/08/2025
Links to other Milestones	Dependent on milestones in activity 4.1 ... Contributes to milestones in activity 1.1 and 1.2, ... Associated with milestones in activity 2.1, 2.3, 2.6, 5.2, 5.4 and 5.5...

Activity 4.3 Sustainable control of pests and diseases

Activity Description	This activity delivers on the ongoing process to develop systems for sustainable control of damaging pests and diseases.
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Activity Achievement Measures	Sustainable systems in place and agrichemical use benchmarked.
Start Date	01/09/2018
End Date	31/08/2025
Leader	

Milestone 4.3.1:

Milestone Description	Improved knowledge of summerfruit pathogen and pest biology
Achievement Measures	<ol style="list-style-type: none"> 1. Key disease cycle components and optimum control intervention points determined for each fruit type in each growing region. 2. Knowledge gaps about weather, inoculum, and host factors driving risk closed through orchard based studies.
Start date	01/09/2019
End Date	31/08/2023
Links to other Milestones	<p>Contributes to milestones in activity 4.1, 4.3..</p> <p>Associated with milestones in activity 2.3, 3.4, 5.2, 5.5</p>

Milestone 4.3.2:

Milestone Description	Improved efficiency of existing control approaches
Achievement Measures	<ol style="list-style-type: none"> 1. Disease control optimised for existing chemical-based technologies using improved knowledge of pathogen biology from 4.3.1 2. Girdling methods developed for tree vigour management that do not exacerbate bacterial canker. 3. Pest control optimised for existing chemical based methods using improved knowledge of pest biology from 4.3.1
Start date	01/09/2019
End Date	31/08/2023

Links to other Milestones	<p>Dependent on success of 4.3.1</p> <p>Contributes to milestones in activity 4.1, 4.3..</p> <p>Associated with milestones in activity 2.3, 3.4, 5.2, 5.5</p>
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Milestone 4.3.3:

Milestone Description	Reduced reliance on agrichemicals
Achievement Measures	<ol style="list-style-type: none"> 1. Develop non-chemical disease options <ol style="list-style-type: none"> 1.1. Ecological and cultural control introduced 1.2. Benign chemicals incorporated into control programmes 2. Non pesticide management options introduced 3. New precision spray technology adopted
Start date	01/09/2019
End Date	30/08/2023
Links to other Milestones	<p>Dependent on success of 4.3.1 and 4.3.2</p> <p>Contributes to milestones in activity 4.1, 4.3..</p> <p>Associated with milestones in activity 2.3, 3.4, 5.2, 5.5</p>

Milestone 4.3.4:

Milestone Description	Inoculum quantification for disease prediction
Achievement Measures	<ol style="list-style-type: none"> 1. Screen DNA-based methods to find ones that quantitatively detect Botrytis and brown rot inoculum in orchards 2. Calibrate the detection methods by season-long orchard sampling of pathogens 3. Incorporate optimum lab systems and predictive thresholds (sensitivity and specificity) into a risk prediction protocol 4. Carry out validation trials 5. System implementation
Start date	01/09/2021

End Date	31/08/2025
Links to other Milestones	Contributes to milestones in activity 4.1, 4.3.. Associated with milestones in activity 2.3, 3.4, 5.2, 5.5

Milestone 4.3.5:

Milestone Description	Develop disease and prediction models
Achievement Measures	<ol style="list-style-type: none"> 1. Develop weather based infection risk models for botrytis and brown rot (using knowledge gained from 4.3.1 <ol style="list-style-type: none"> 1.1. Adapt existing botrytis risk model for use in cherries and develop prototype predictive models for brown rot and botrytis 1.2. Accuracy refinement using prototype models in orchard trials 1.3. Risk model implementation through industry web site and/or smart phone app. 2. Pest prediction models
Start date	01/09/2020
End Date	31/08/2025
Links to other Milestones	Contributes to milestones in activity 4.1, 4.3.. Associated with milestones in activity 2.3, 3.4, 5.2, 5.5

Milestone 4.3.6:

Milestone Description	Phytosanitary risks
Achievement Measures	<ol style="list-style-type: none"> 1. Preparedness programmes in place for possible market closure through interception of unwanted pests and microorganisms by importing countries 2. Organisms that constitute a risk identified
Start date	01/09/2019
End Date	31/08/2025
Links to other Milestones	Contributes to milestones in activity 4.1, 4.3.. Associated with milestones in activity 2.3, 3.4, 5.2, 5.5

Milestone 4.3.7:

Milestone Description	Post harvest pest and disease control
Achievement Measures	1. Use of ethyl formate for pest control introduced 2. Irradiation for pest and pathogen eradication scoped
Start date	01/09/2018
End Date	31/08/2025
Links to other Milestones	Contributes to milestones in activity 4.1, 4.3. Associated with milestones in activity 2.3, 3.4, 5.2, 5.5

Milestone 4.3.8:

Milestone Description	Benchmarking agrichemical use
Achievement Measures	Compliance with recommended guidelines Reduced agrichemical use
Start date	01/09/2018
End Date	31/08/2025
Links to other Milestones	Contributes to milestones in activity 4.1, 4.3. Associated with milestones in activity 2.3, 3.4, 5.2, 5.5

Activity 4.4 Consistent fruit set

Activity Description	The management of fruit set factors including pollination to maximise consistent production. Novel pollination systems developed to meet the requirements of the new high performance production systems.
Activity Achievement Measures	Consistent and reliable fruit set leads to high performance production systems

Start Date	01/09/2018
End Date	31/08/2025 <i>Annual 01/08/2020 Stop: Go – PSG to evaluate progress and approve plan for industry trials on new pollinators</i>
Leader	

Milestone 4.4.1:

Milestone Description	Honeybee performance under netting structures improved
Achievement Measures	<ol style="list-style-type: none"> 1. Reduced bee losses (deaths) 2. Improved pollination performance
Start date	01/09/2018
End Date	31/08/2025
Links to other Milestones	<p>Contributes to milestones in activity 3.2, 3.3 3.4, 4.1, 4.2and 5.2</p> <p>Associated with milestones in activity 5.4 and 5.5</p>

Milestone 4.4.2:

Milestone Description	Optimised hive strength, placement and density for new high performance summerfruit plantings
Achievement Measures	<ol style="list-style-type: none"> 1. Improved and consistent fruit set
Start date	01/09/2018
End Date	31/08/2025
Links to other Milestones	<ul style="list-style-type: none"> • Contributes to milestones in activity 3.2, 3.3 3.4, 4.1, 4.2and 5.2 • Associated with milestones in activity 5.4 and 5.5

Milestone 4.4.3:

Milestone Description	<ul style="list-style-type: none">• Implementation of new pollinators for all growing regions
Achievement Measures	<ul style="list-style-type: none">• Identification of new pollinators• Introduction of new pollinators
Start date	<ul style="list-style-type: none">• 01/09/2018
End Date	<ul style="list-style-type: none">• 31/08/2025
Links to other Milestones	<ul style="list-style-type: none">• Contributes to milestones in activity 3.2, 3.3 3.4, 4.1, 4.2and 5.2• Associated with milestones in activity 5.4 and 5.5

Project 5 : Industry development

Project 5 : Industry development	
Project description	<p>This project will:</p> <ul style="list-style-type: none"> • improve the quality of information utilised in strategic decisions • cope with the varying lead times, pricing parameters, and sequencing needs of all five summerfruit crops • build industry awareness, understanding, and commitment necessary for effective implementation of the strategy • decrease the uncertainty surrounding such decisions by allowing for interactive learning between stakeholders • improve the quality of the strategic analysis and choices by involving those people closest to the situation.
Project achievement measures	<ol style="list-style-type: none"> 1. Information will be available to those who need it, when they need it through an effective implementation and extension programme such as on line and off line training modules 2. Improved models of crop forecasting 3. New industry systems for data management and benchmarking 4. New investment taking place within the industry 5. Innovative and informed industry with best practice guidelines developed.
Start date	01/09/2019
End date	31/08/2025
Leader	

Activity 5.1 Information management

Activity Description	In this activity we will develop innovative systems to collect and provide rapid, up-to-date information to growers and all parts of the supply chain. Industry expectations are higher about how information is delivered (both consumers and growers).
Activity Achievement Measures	Information will be available to those who need it, when they need it through an effective implementation and extension programme.
Start Date	01/09/2018
End Date	31/08/2023

	<i>01/08/2020 Stop: Go – PSG to evaluate progress and approve plan for industry IT trials and promotional material</i>
Leader	

Milestone 5.1.1:

Milestone Description	Assess/survey information needs in industry
Achievement Measures	Information needs identified
Start date	01/09/2018
End Date	31/08/2020
Links to other Milestones	Associated with milestones in activity 2.5, 5.3, 5.5,

Milestone 5.1.2:

Milestone Description	Design and trial new IT tools and systems
Achievement Measures	New information and IT systems identified and trialled
Start date	01/09/2019
End Date	31/08/2023
Links to other Milestones	Associated with milestones in activity 2.5, 5.3, 5.5,

Milestone 5.1.3:

Milestone Description	Design generic promotional material
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Achievement Measures	New promotional material in use.
Start date	01/09/2020
End Date	31/08/2023
Links to other Milestones	Associated with milestones in activity 2.5, 5.3, 5.5,

Activity 5.2 Crop forecasting and labour requirement modelling

Activity Description	In this activity we will develop systems for reliable crop forecasting and labour modelling
Activity Achievement Measures	Crop forecasting achieved to within 10% of final date and yield
Start Date	01/09/2018
End Date	31/08/2025 <i>01/08/2020 Stop: Go – PSG to evaluate progress and approve plan for industry trials</i>
Leader	

Milestone 5.2.1:

Milestone Description	Review current systems
Achievement Measures	Current system strengths and weaknesses identified
Start date	01/09/2018
End Date	01/06/2021
Links to other Milestones	Dependent on milestones in activities 4.1, Contributes to milestones in activities 1.6,2.6,3.1,3.3,3.4,4.2, 4.3, 4.4, 5.1

	Associated with milestones in activity 3.2
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Milestone 5.2.2:

Milestone Description	Design new options for current and high performance systems
Achievement Measures	New options are ready for trialling
Start date	01/09/2020
End Date	01/06/2023
Links to other Milestones	Dependent on milestones in activities 4.1, Contributes to milestones in activities 4.4, and 5.1 Associated with milestones in activity 3.2 and 4.3

Milestone 5.2.3:

Milestone Description	Trial new options for current and high performance systems and implement best option
Achievement Measures	Industry trials for crop forecasting have improved level of accuracy and are implemented.
Start date	01/09/2021
End Date	31/08/2022 and 31/08/2025
Links to other Milestones	Dependent on milestones in activities 4.1, Contributes to milestones in activities, 4.4 and 5.1 Associated with milestones in activity 3.2 and 4.3

Activity 5.3 Benchmarking

Activity Description	In this activity we will develop interactive systems to enable growers to benchmark and compare performance. By this the industry will build on the top 10% of current practice and leave old systems behind.
Activity Achievement Measures	Systems developed to provide improved training/tech transfer.
Start Date	01/09/2018
End Date	31/08/2025 <i>01/08/2020 Stop: Go – PSG to evaluate progress and approve plan for industry trials</i>
Leader	

Milestone 5.3.1:

Milestone Description	Review current summerfruit systems and compare with other crops
Achievement Measures	Review completed
Start date	01/09/2018
End Date	31/08/2020
Links to other Milestones	Contributes to milestones in activity 4.1 Associated with milestones in activity 5.1

Milestone 5.3.2:

Milestone Description	Design and trial new processes and IT systems
Achievement Measures	Systems developed and trialled

Start date	01/09/2019
End Date	31/08/2022
Links to other Milestones	Contributes to milestones in activity 4.1 Associated with milestones in activity 5.1

Milestone 5.3.3:

Milestone Description	Develop clubs <u>clusters</u> of interest
Achievement Measures	Clubs <u>Clusters</u> of interest created around particular innovation processes through Summerfruit NZ.
Start date	01/09/2020
End Date	31/08/2025
Links to other Milestones	Contributes to milestones in activity 4.1 Associated with milestones in activity 5.1

Activity 5.4 New investment

Activity Description	In this activity we will prepare financial production models to encourage new investment.
Activity Achievement Measures	Financial models are available for use by all
Start Date	01/09/2019
End Date	01/06/2025
Leader	

Milestone 5.4.1:

Milestone Description	Integrate impacts of all new systems
Achievement Measures	Data collected and analysed
Start date	01/09/2019
End Date	31/08/2023
Links to other Milestones	Contributes to milestones in activities 2.6, 3.1, 3.3 and 3.4 Associated with milestones in activities 1.6,3.2,4.2 and 4.4

Milestone 5.4.2:

Milestone Description	Analysis of information needs for new investment
Achievement Measures	Models developed and manuals drafted
Start date	01/009/2020
End Date	31/08/2024
Links to other Milestones	Contributes to milestones in activities 2.6, 3.1, 3.3 and 3.4 Associated with milestones in activities 1.6,3.2,4.2 and 4.4

Milestone 5.4.3:

Milestone Description	Design prospectus and financial models
Achievement Measures	Prospectus and financial models completed and in use.
Start date	01/09/2021

End Date	31/08/2024
Links to other Milestones	Contributes to milestones in activities 2.6, 3.1, 3.3 and 3.4 Associated with milestones in activities 1.6,3.2,4.2 and 4.4

Milestone 5.4.4:

Milestone Description	Develop <u>and implement</u> support programme for new investment
Achievement Measures	Support programme developed and promoted/ <u>implemented</u>
Start date	01/09/2022
End Date	31/08/2025
Links to other Milestones	Contributes to milestones in activities 2.6, 3.1, 3.3 and 3.4 Associated with milestones in activities 1.6,3.2,4.2 and 4.4

Milestone 5.4.5:

Milestone Description	<u>Positioning New Zealand exporters</u> <u>This activity would work with Summerfruit Exporters to identify a more collaborative organisational model for NZ exporters.</u>
Achievement Measures	<u>Optimum organisational model identified and implemented</u>
Start date	<u>01/09/2018</u>
End Date	<u>31/08/2020</u>
Links to other Milestones	<u>Contributes to milestones in activities 1.1,1.2, 2.1, 2.2, 2.3, 2.4,2.6</u> <u>Associated with milestones in activities 3.4,5.2,5.3</u>

Activity 5.5 New technology uptake

Activity Description	A better understanding of how technology is used by industry participants, and how they go about adopting technology is crucial for industry success. New skills will be required for the widespread adoption of high performance planting systems.
Activity Achievement Measures	Best practice guidelines developed and implemented across the supply chain Increased returns for grower, packer and exporter
Start Date	01/09/2018
End Date	31/08/2025 <i>01/08/2020 Stop: Go – PSG to evaluate progress and approve plan for industry trials</i>
Leader	

Milestone 5.5.1:

Milestone Description	Review current industry adoption rates and identify gaps
Achievement Measures	Review completed of adoption rates
Start date	01/09/2018
End Date	31/08/2020
Links to other Milestones	Contributes to milestones in activities 2.5, 3.1, 3.3 and 3.4... Associated with milestones in activities 3.2,4.1,4.2,4.3,4.4 and 5.1

Milestone 5.5.2:

Milestone Description	Design enhanced models for better adoption
Achievement Measures	All changes in systems for summerfruit collated adoption models and best practice identified for future.

Start date	01/09/2019
End Date	31/08/2021
Links to other Milestones	Contributes to milestones in activities 2.5, 3.1, 3.3 and 3.4... Associated with milestones in activities 3.2,4.1,4.2,4.3,4.4 and 5.1

Milestone 5.5.3:

Milestone Description	Trial <u>and implement</u> new models for enhanced adoption
Achievement Measures	Disseminate successful innovation as fast as practicable.
Start date	01/09/2020
End Date	31/08/2025
Links to other Milestones	Contributes to milestones in activities 2.5, 3.1, 3.3 and 3.4... Associated with milestones in activities 3.2,4.1,4.2,4.3,4.4 and 5.1