AGROECOLOGICAL CROP PROTECTION TO MEET FUTURE CONSUMER DEMANDS

A LIGHTER TOUCH

Horticulture™ New Zealand
Ahumāra Kai Aotearoa

Ministry for Primary Industries
Manatū Ahu Matua

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Vision: For New Zealand to be the most desirable source of food in the world based on agroecological crop protection practices.

Why: To meet consumer demands for sustainably and ethically produced New Zealand plant-based products while protecting the environment.

How: By identifying and supporting new crop protection tools and integrating biological and ecological processes into food production.

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Zespri™ KIWIFRUIT

FAR®

BRAGATO RESEARCH INSTITUTE
RANGAHAU KAREPE, WĀINA O AOTEAROA

Vegetables NEW ZEALAND Inc

onions NEW ZEALAND INC
An integrated industry

Process Vegetables NZ

CITRUS NEW ZEALAND

TomatoesNZ

Boysenberries NEW ZEALAND

FRESH NEW ZEALAND PERSIMMONS
ripe when crisp

NEW ZEALAND BUTTERCUP SQUASH COUNCIL INC.

STRAWBERRY GROWERS NZ

Passionfruit New Zealand

Summerfruit NEW ZEALAND

feijoa®

CORTEVA™ agriscience

syngenta

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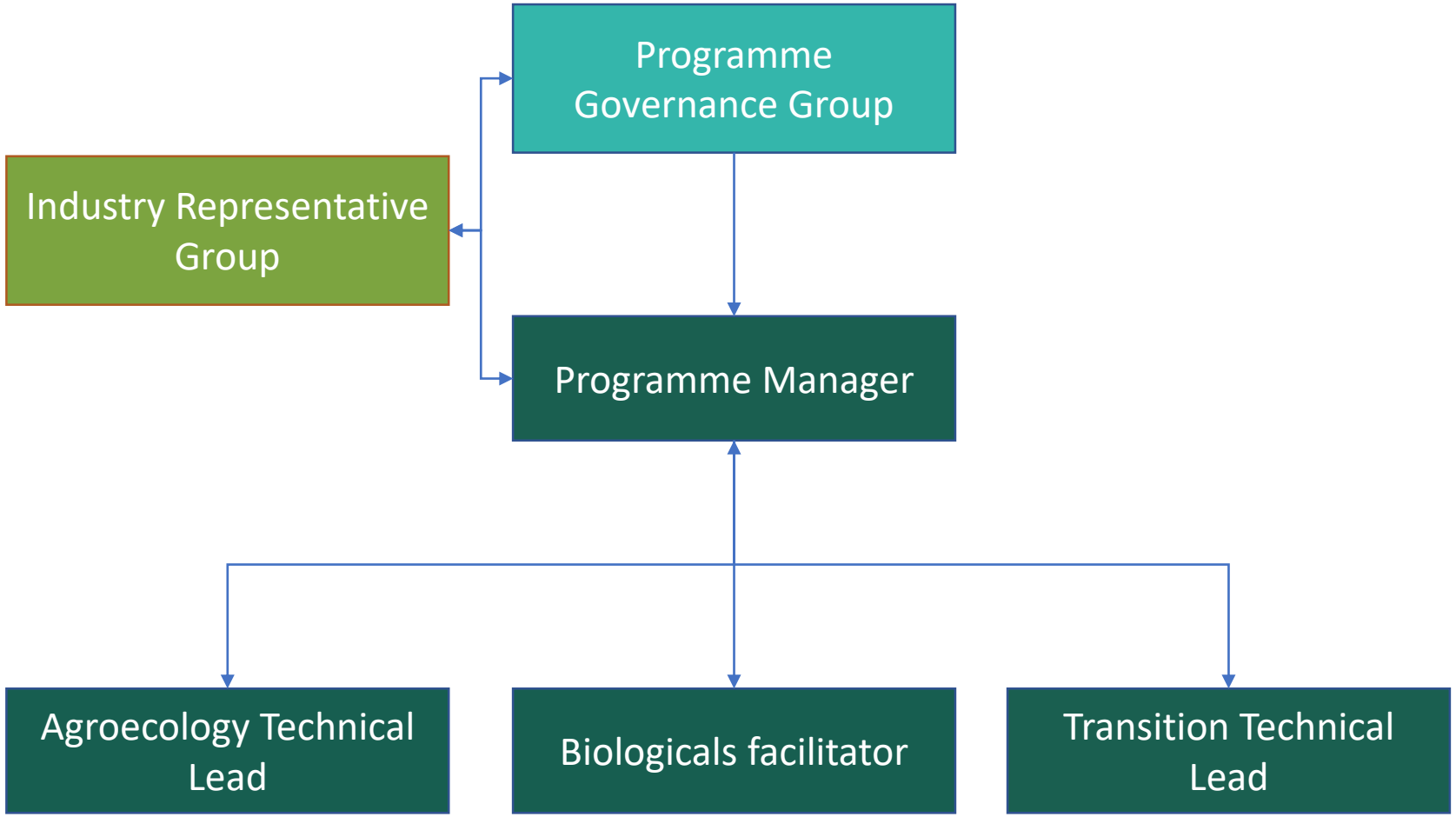
Programme management



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An integrated programme: A Lighter Touch seeks to use the best technology available to shift the focus of crop protection, and integrate biological and ecological processes into food production – to achieve a lighter touch on the environment and meet consumer demands.

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Programme themes

Theme 1: Future focus

Theme 2: Agroecological crop protection

Theme 3: Transition projects

Theme 4: Project management

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Theme 1: Future focus

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Theme 3: Transition projects

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Theme 2: Agroecological crop protection

Project 4 – Scoping study

Project 5 – Biopesticides path to market

Project 6 – Upscaling biological control capability and adoption

Project 7 – New technologies for crop protection

Project 8 – Proof of concept

Project 9 – Extension focus

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Project 5 – Biopesticides path to market

Project milestones:

MS5.1: upscaling the production and availability of biopesticides

MS5.2: demonstrate pathway to biopesticide registration

MS5.3: achieving increased use of biopesticides

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MS5.1: upscaling the production and availability of biopesticides

- Identify candidate biopesticides for commercialisation;
- Match to industry gaps and priorities;
- Facilitate commercialisation activities.

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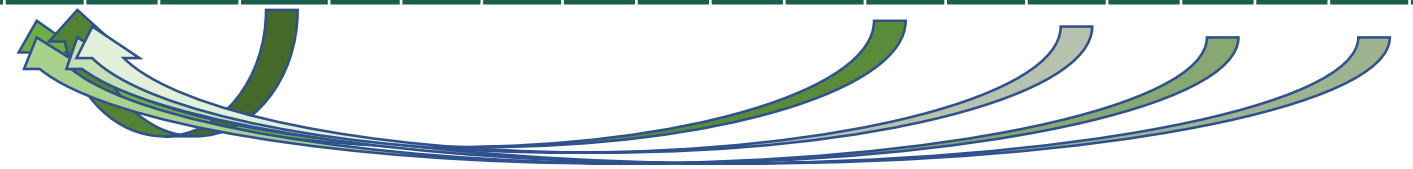
MS5.1: Match to industry gaps and priorities

Pest:	thrips	birds	whitefly	aphids	caterpillar	carpophilus	tree borer	slugs	Vege bug	nematodes	weevils	mites	flower moth	TPP	Onion fly	Grass grub	mealy bug	PVH	weta
Rank:	1	2	3	4	5	6	7	7	8	9	9	10	11	11	11	12	13	14	15

Disease:	bacterial	fusarium soil	anthracnose	botrytis	soil borne	sclerotinia	alternaria	brown rot	melanose	citrus scab	downy mildew	septoria	phytophthora	fusarium foliar	smut	powdery mildew	white rot	ripe rots	Violet root rot	gummy stem blight	rust
Rank:	1	2	3	4	4	5	6	7	8	9	9	10	10	10	11	12	12	12	12	13	13



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MS5.2: demonstrate pathway to biopesticide registration

- Document the regulatory pathway;
- Work with registrants on case studies;
- Review the process with both registrants and regulators;
- Overcome regulatory impediments.

MS5.3: achieving increased use of biopesticides

- Plans for integration of biopesticides into CP programmes;
- Programme and approach with industry organisations;
- Ensure *A Lighter Touch* activities contribute to:
  - increased biopesticide adoption.

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Project 6 – Upscaling biological control capability

Project milestones:

MS6.1: Overcoming impediments of BCA production;
Candidates for upscaling;

MS6.2: Enhanced agroecology projects;

MS6.3: New BCA’s

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Project 7 – New technologies for crop protection

- Review and evaluate available technologies;
- Investigate feasibility and effectiveness;
- Integrate new technologies into CP programmes.

Project 8 – Proof of concept

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- Identify proof of concept projects:
  - Biopesticide, BCA, new technologies;
- Planning for integration into CP programmes.

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Project 9 – Extension focus

- **MS9.1:** Model farms and focus groups;
- Establish fruit, vegetable, arable model systems;
- Demonstrate proof of concept;
- Extension & training plans with focus groups;
- Evaluate the rate of adoption of ACP.

Project 9 – Extension focus

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- **MS9.2:** Information tools
- Define tool & content requirements;
- Develop tools for growers and other users.

Programme website

www.a-lighter-touch.co.nz

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