

41274 Implement and monitor a crop growth plan

Kaupae Level	4
Whiwhinga Credit	25
Whāinga Purpose	This skill standard is intended for learners working in arable farming. They will be able to develop a crop rotation plan to inform implementation, implement and manage crop growth activities, and monitor and report against crop growth plan and audit requirements. This skill standard aligns with the New Zealand Certificate in Agriculture (Level 4) [Ref: 5677].

Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Develop a crop rotation plan to inform crop growth plan implementation.	a. Develop a crop rotation plan to inform crop selection and sequencing.
	b. Develop operational planning to support implementation of the crop growth plan.
2. Implement a crop growth plan.	a. Communicate requirements related to crop growth with stakeholders.
	b. Manage resources to support planting and growth targets.
	c. Identify potential implementation issues and describe appropriate responses.
	d. Manage competing resource and operational requirements across different crops on farm.
	e. Maintain biosecurity standards according to workplace procedures.
3. Manage crop growth activities.	a. Manage crop growth activities in accordance with the farm environment plan.
	b. Determine and apply contractual requirements to crop growth activities.
	c. Use industry information to inform crop growth planning and activities.

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
4. Monitor crop growth and report against crop growth plan and audit requirements.	a. Monitor and report on crop inputs against crop growth plan and audit requirements.
	b. Monitor and report on crop growth against the crop growth plan.
	c. Monitor and report on soil moisture against crop growth plan requirements.

Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria

Assessment specifications:

All activities must be carried out in accordance with workplace health and safety requirements, workplace procedures, and manufacturer's specifications.

Providers must give due consideration to embedding ngā kaupapa (principles) o Te Tiriti o Waitangi when designing delivery activities relevant to this standard. These principles are outlined in [Guidelines for Providers: Embedding Tirohanga Māori](#).

Providers must give due consideration to the needs and values of Pacific peoples and other cultural groups when designing delivery activities relevant to this standard, ensuring practices are inclusive and equitable.

Ākonga/learners should be assessed against this standard in a real-life context using naturally occurring evidence. A verifier's checklist with appropriate comments confirming competency is acceptable if accompanied by evidence that includes examples from the learner's performance.

For Learning Outcome 2, evidence of implementing a crop growth plan may include coordinating activities required to support planting and crop growth targets, such as communication with stakeholders, resource management, responding to implementation issues, managing competing operational requirements, and maintaining biosecurity standards.

Definition

Crop growth plan refers to the planning and management of a single crop within a wider crop rotation.

Ngā momo whiwhinga | Grades available

Achieved

Ihirangi waitohu | Indicative content

Crop rotation planning

- soil testing and soil structure
- crop types and effect on soil
- field history
- returns and margins
- soil moisture requirements and planning tools e.g. plant choice, water requirements, seasonal rain outlook, irrigation availability

- reasons for crop rotation e.g. soil contamination, disease and pest mitigation, nutrient balance, implications of successive crops
- crop selection and sequencing appropriate to crop type, soil condition, field history, moisture requirements, expected returns, and pest and disease risk.
- operational planning e.g. arranging machinery, seed, labour, timing requirements.

Implementation of crop growth plan

- communication with stakeholders e.g., employer, supervisor, rural professionals, grower representatives
- crop requirements and growth targets e.g. irrigation, nutrient requirements, isolation distance for pollination, timing requirements
- managing resources to support crop growth e.g. labour, machinery, agrichemicals, irrigation, inputs and timing
- identifying potential implementation issues and appropriate responses e.g. weather disruption, machinery failure, pest or disease pressure, resource limitations
- managing competing resource and operational requirements across different crops on farm
- biosecurity practices e.g. machinery hygiene, preventing cross contamination, managing pest and disease risks.

Management of crop growth activities

- crop growth activities e.g. fertiliser application, irrigation scheduling, pest monitoring, disease monitoring
- applying management principles, e.g. Integrated Pest Management (IPM), Integrated Weed Management (IWM)
- managing crop growth activities in accordance with the farm environment plan, e.g. buffer zones near waterways, soil erosion control, nutrient and agrichemical management
- contractual requirements relevant to crop growth activities e.g. quality specifications, timing requirements, traceability requirements
- industry information to inform crop growth planning and activities e.g. seasonal outlooks, agronomic advice, weather information, market or grower requirements.

Monitoring and reporting

- monitoring and reporting crop inputs against crop growth plan and audit requirements e.g. nutrient, agrichemical and water application records, logs, compliance records
- monitoring and reporting crop growth against the crop growth plan e.g. crop assessment, growth observations, growth targets, crop performance indicators
- monitoring and reporting soil moisture against crop growth plan requirements e.g. soil moisture probes, sensors, irrigation observations.

Rauemi | Resources

- [Health and Safety at Work Act 2015](#).
- [Resources](#) (Foundation for Arable Research).
- Farm-specific Standard Operating Procedures.

Pārongo Whakaū Kouna | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Food and Fibre Industry Skills Board
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Agriculture, Forestry and Fisheries > Agriculture > Arable Farming
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0052

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	30 July 2026	N/A
Kōrero whakakapinga Replacement information	N/A		
Rā arotake Planned review date	31 December 2031		

Please contact the Food and Fibre Industry Skills Board at info@foodandfibreisb.nz to suggest changes to the content of this skill standard.