

41276**Monitor crop protection plan implementation**

Kaupae Level	4
Whiwhinga Credit	10
Whāinga Purpose	This skill standard is intended for learners working in arable farming. They will be able to monitor a crop ecosystem, identify crop protection issues, establish and implement an agreed solution, and monitor and report on implementation outcomes. 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. Monitor a crop ecosystem.	a. Monitor crop ecosystem indicators, including volunteer plants that could cause out-crosses in crops under production.
	b. Identify opportunities for preventative agronomy.
	c. Identify and report any problems.
2. Establish and implement a solution to crop protection problems.	a. Identify potential solutions to crop protection problems.
	b. Determine economic implications of potential solutions.
	c. Evaluate potential solutions to confirm alignment with crop rotation and crop growth plans.
	d. Communicate problems and potential solutions with stakeholders.
	e. Carry out biosecurity protocols in accordance with the farm environment plan, and record any risks.
	f. Select and implement an agreed solution.
3. Monitor implemented solutions and their outcomes.	a. Monitor and report on implementation of crop protection measures.
	b. Update crop management plan to reflect actions taken and outcomes.

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.

Ngā momo whiwhinga | Grades available

Achieved

Ihirangi waitohu | Indicative content**Crop ecosystem**

- normal and abnormal features of a crop ecosystem
- crop ecosystem indicators, including pest presence, disease symptoms, weed pressure, growth irregularities, volunteer plants, beneficial insects, and crop health
- Integrated Pest Management (IPM) e.g. establishing beneficial planting, pest thresholds, biological controls
- Integrated Weed Management (IWM)
- out-crosses and volunteer plants that may affect crop production
- preventative agronomy e.g. fungal pathogen planning, crop hygiene, resistant varieties, crop rotation considerations
- early detection indicators: pest presence, disease symptoms, growth irregularities, weed pressure
- monitoring and reporting crop protection issues and risks.

Implementation solutions to crop protection problems

- identifying and evaluating potential crop protection solutions
- crop rotation and crop growth plan considerations e.g. timing, crop stage, withholding periods, resistance management, follow-up actions
- Integrated Pest Management (IPM) e.g. balancing competing requirements in decision making
- industry sources of information e.g. industry resources, research publications, agronomic advice
- economic factors of crop protection decisions e.g. treatment cost, production loss, crop quality, timing
- communication with stakeholders e.g. employer, supervisor, rural professionals, contractors, grower representatives

- biosecurity protocols e.g. quarantine for infected plants, machinery hygiene, vehicle wash-down, preventing spread of pests and disease
- recording biosecurity risks and actions taken
- selecting and implementing agreed crop protection solutions.

Monitoring and reporting

- monitoring and reporting implementation of crop protection measures e.g. treatment timing, effectiveness, crop response, pest and disease status
- recording requirements for agrichemicals and crop protection activities
- updating crop management plans to reflect actions taken, monitoring outcomes, and future crop protection requirements.

Rauemi | Resources

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

Pārongo Whakaū Kounga | 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.