

Title	Describe integrated pest management for a plant protection programme		
Level	3	Credits	3

Purpose	People credited with this unit standard are able to describe: integrated pest management (IPM) for a given plant protection programme; non-agrichemical methods of pest control; and the relationship between the physical and chemical properties and the environmental effect and fate of plant protection products.
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Classification	Primary Sector > Primary Sector Core Skills
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Available grade	Achieved
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Guidance Information

- 1 Legislation relevant to this unit standard includes but is not limited to:
 - Agricultural Compounds and Veterinary Medicines Act 1997;
 - Biosecurity Act 1993;
 - Hazardous Substances and New Organisms Act 1996;
 - Health Act 1956;
 - Health and Safety at Work Act 2015;
 - Resource Management Act 1991;
 - and any subsequent amendments.
- 2 All evidence presented in this unit standard must be in accordance with workplace procedures.
- 3 Definitions

Agrichemical refers to any substance, whether inorganic or organic, man-made or naturally occurring, modified or in its original state, that is used in any agriculture, horticulture or related activity, to eradicate, modify or control flora and fauna. It includes agricultural compounds, and for the purposes of agrichemical supply, includes fertilisers, vertebrate pest control products, and oral nutrition products.

Environmental fate is a generic term describing the interaction of the product, or substance concerned, with the environment, including descriptions of:

 - a the various pathways by which a substance may enter the environment;
 - b the possible interactions with the environment;
 - c the consequences of these interactions, especially where there is potential for adverse environmental effect.

Workplace procedures refer to policies and procedures on safety, operation, and production set down by the employer or host organisation.

Outcomes and performance criteria

Outcome 1

Describe IPM for a plant protection programme.

Performance criteria

- 1.1 Describe IPM in relation to its application for a specific plant protection programme.
- 1.2 Describe IPM in terms of the process for implementation of a plant protection programme.
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| Range | process for implementation includes but is not limited to – pest identification, management systems, monitoring, economic thresholds. |
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- 1.3 Describe IPM in terms of its benefits.
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| Range | benefits include but are not limited to – the environment, the consumer, financial and physical sustainability. |
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- 1.4 Describe IPM in relation to the use of resistance management strategies.
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| Range | strategies may include but are not limited to – minimise pesticide use, avoid mixing two pesticides, use long term rotation for pesticides, avoid persistent pesticides; evidence of two strategies is required. |
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Outcome 2

Describe non-agricultural methods of pest control.

Performance criteria

- 2.1 Describe non-agricultural methods associated with pest control in terms of their advantages and disadvantages.
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| Range | methods may include but are not limited to – natural predators, use of traps, field sanitation, nutrient management, apply natural insecticides, deep ploughing; evidence of four methods is required; evidence of one advantage and one disadvantage is required. |
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Outcome 3

Describe the relationship between the physical and chemical properties and the environmental effect and fate of plant protection products.

Performance criteria

- 3.1 Describe physical and chemical properties of plant protection products in terms of their environmental effects and fate.

Range effects and fate include but are not limited to – adsorption, transfer, degradation, food chain accumulation, soil residues, crop residues.

Replacement information	This unit standard and unit standard 21552 replaced unit standard 10892.
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This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	27 May 2005	31 December 2023
Review	2	24 February 2022	31 December 2026
Review	3	24 April 2025	31 December 2026

Consent and Moderation Requirements (CMR) reference	0052
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.