

Title	Identify plant pests, diseases, and disorders, and describe control measures		
Level	3	Credits	4

Purpose	<p>This unit standard is for people handling agrichemicals in land based industries.</p> <p>People credited with this unit standard are able to, for plant pests, plant diseases, and plant disorders: define; identify the presence of; describe life cycles, distinguishing features, prevention and control methods.</p>
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Classification	Pest Management > Pest Control
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Available grade	Achieved
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Guidance Information

- 1 Legislation and regulations relevant to this unit standard include but are not limited to –
Hazardous Substances and New Organisms Act 1996, and relevant regulations;
Health and Safety in Employment Act 1992.
- 2 The New Zealand Standard applicable to this unit standard is NZS 8409:2004 *The management of agrichemicals*, available from <http://www.standards.co.nz/>.
- 3 Codes and related documentation applicable to this unit standard include but are not limited to:
Responsible Care Management System, available from the New Zealand Chemical Industry Council (NZCIC, PO Box 5069, Wellington).
- 4 Definitions
agrichemical – 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, fertilisers, vertebrate pest control products and oral nutrition products (this definition differs to that in NZS 8409:2004, where *agrichemicals* exclude fertilisers, vertebrate pest control products and oral nutrition products);
plant pest – an undesirable organism injurious to humans or plants;
plant disease – a plant growth symptom that develops in response to infection from a pathogen;
plant disorder – a plant growth response to an abiotic factor such as nutrient deficiency, weather or herbicide damage;
signs – indication of the presence of the plant pest, plant disease, or plant disorder;
symptoms – the plant's response to the presence of the plant pest, plant disease, or

plant disorder;

legal – a weed prevention and control method carried out in response to legislative requirements which includes but is not limited to the Biosecurity Act 1993.

5 Assessment

identification of the presence of plant pests, plant diseases, and plant disorders does not include laboratory analysis.

Outcomes and performance criteria

Outcome 1

Define, and identify the presence of plant pests, plant diseases, and plant disorders.

Performance criteria

- 1.1 The terms plant pest, plant disease, and plant disorder are defined in relation to a specified land based industry.
- 1.2 The presence of plant pests, plant diseases, and plant disorders are identified by their signs, and visible symptoms.

Range evidence is required for at least three plant pests, three plant diseases, and three plant disorders.

Outcome 2

Describe the life cycles of plant pests and plant diseases, and the distinguishing features of plant pests, plant diseases, and plant disorders.

Performance criteria

- 2.1 Stages in plant pest, and plant disease life cycles are described in sequence, and the signs, and symptoms of each stage are described in terms of plant damage.
- 2.2 Plant pests, plant diseases, and plant disorders are distinguished by their signs, and symptoms.

Range evidence is required for at least four plant pests, three plant diseases, and two plant disorders.

Outcome 3

Describe plant pest, plant disease, and plant disorder prevention and control methods.

Range biological, physical, cultural, chemical, legal, integrated pest management (IPM).

Performance criteria

- 3.1 Prevention and control methods are described in terms of their advantages and disadvantages.
- 3.2 Prevention and control methods are described in terms of their suitability for a specified land based industry.

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 2015
Review	2	18 August 2011	31 December 2015
Rollover	3	17 October 2013	31 December 2015
Rollover	4	17 September 2015	31 December 2019
Rollover	5	26 September 2019	31 December 2020

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>.