

Title	Demonstrate knowledge of soils and assist with soil management practices		
Level	3	Credits	10

Purpose	<p>This unit standard is for people working in the primary industry.</p> <p>People credited with this unit standard are able to: demonstrate knowledge of how soil properties, soil fertility and pH impact on production in a primary industry workplace; and assist with soil management practices to optimise soil health and minimise soil loss.</p>
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Classification	Agriculture > General Agriculture
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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:
 - Health and Safety at Work Act 2015.
- 2 Definitions

On-farm procedures refer to the verbal or written instructions to staff on procedures for animal care, welfare, and management.

Soil properties are defined as the soil forming factors, and physical, biological and chemical factors. Examples of soil properties include: soil type and classification, water holding capacity; soil structure and texture; micro and macro organisms, organic matter.
- 3 Learners in a dairy farming context must include the use of effluent as a fertiliser.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of how soil properties, soil fertility and pH impact on production in a primary industry workplace.

Performance criteria

- 1.1 Identify different soil types in terms of a primary industry production system.

- 1.2 Identify soil properties and explain their effect on production in a primary industry workplace.
Range evidence of at least five properties is required.
- 1.3 Identify soil deficiencies and describe remedial action in accordance with on-farm procedures.
Range nitrogen, phosphorus, sulphur, potassium.
- 1.4 Describe how fertilisers are used to correct nutrient deficiencies and increase production.
- 1.5 Describe how pH affects plant growth and nutrient availability.
- 1.6 Describe methods of optimising pH in accordance with on-farm procedures.

Outcome 2

Assist with soil management practices to optimise soil health and minimise soil loss.

Performance criteria

- 2.1 Assist with soil management practices to optimise soil health and minimise soil loss in accordance with on-farm procedures.
Range evidence may include but is not limited to – soil pugging prevention, fertiliser use, lime application, effluent application, minimising soil compaction, fencing off waterways, grazing management, soil cultivation, erosion control, aeration, use of organic matter, addition of soil organisms, irrigation, drainage; apply at least three soil management practices.

Replacement information	This unit standard replaced unit standard 28921.
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Planned review date	31 December 2024
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	27 February 2020	N/A

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>.

Comments on this unit standard

Please contact the Primary Industry Training Organisation standards@primaryito.ac.nz if you wish to suggest changes to the content of this unit standard.