

Title	Plan a fertiliser programme for horticulture use		
Level	3	Credits	10

Purpose	This unit standard is for people working, or intending to work, in horticulture. People credited with this unit standard are able to: describe the properties and characteristics of fertilisers used in horticulture; assess the nutrient status of a selected horticulture area; and plan an annual fertiliser programme for a selected horticulture area.
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Classification	Horticulture > Production Horticulture
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Available grade	Achieved
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Guidance Information

- 1 A selected horticulture area may include an amenity or landscape area; or a fruit, viticulture, vegetable, flower or nursery crop.
- 2 Codes and related documentation applicable to this unit standard include but are not limited to: *The Code of Practice for Fertiliser Use*, available from the New Zealand Fertiliser Manufacturers Research Association (NZFMRA) <http://www.fertresearch.org.nz>.
- 3 Legislation relevant to this unit standard includes but is not limited to the Health and Safety in Employment Act 1992 and the Resource Management Act 1991.

Outcomes and performance criteria

Outcome 1

Describe the properties and characteristics of fertilisers used in horticulture.

Performance criteria

- 1.1 Properties and characteristics of fertilisers are described in terms of solubility and formulation.

Range	soluble, slow release, organic, inorganic, salt index, particle size, acidity, chelate, granule, liquid, foliar, solid, straight, mixture, compound.
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- 1.2 Characteristics of fertilisers are described in terms of the percentages of major nutrients they contain.

- 1.3 Advantages and disadvantages of fertilisers are compared in terms of their rate of release, size of granule, ease of application, storage and handling characteristics and effects on soil.
- 1.4 Common fertilisers are recognised by sight.
- Range ten fertilisers commonly used in horticulture.

Outcome 2

Assess the nutrient status of a selected horticulture area.

Range one of – soil or plant.

Performance criteria

- 2.1 Area is sampled for nutrient analysis in accordance with the requirements of the testing laboratory.
- 2.2 Location of each sample taken is marked and recorded on a site plan.
- 2.3 Sample is packaged, labelled, and dispatched to ensure condition of sample is preserved until testing commences at a quality certified testing laboratory.
- 2.4 Nutrient status of the selected area is assessed in terms of optimum nutrient ratios and levels.
- 2.5 Analysis of laboratory results identifies nutrient deficiencies or excesses.
- 2.6 Testing process and test interpretation are assessed in terms of their limitations.

Outcome 3

Plan an annual fertiliser programme for a selected horticulture area.

Performance criteria

- 3.1 Annual fertiliser programme for a selected horticulture area is planned using soil and/or foliage test results and other site-specific information.
- Range plant nutrient analysis data, drainage, soil type, disease susceptibility, length of growing season, budget, conversion of soil test data to kg/ha of nutrient, season, climate, and crop load.
- 3.2 Annual fertiliser programme is expressed in terms of kg/ha of nutrient and fertiliser necessary to meet nutrient requirements.

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	25 July 2006	31 December 2023
Review	2	30 June 2022	31 December 2023

Consent and Moderation Requirements (CMR) reference	0032
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

This unit standard is expiring