

Title	Describe nursery growing media and soils		
Level	2	Credits	5

Purpose	People credited with this unit standard are able to describe: the properties of growing media; the characteristics of soil-less growing media; and the characteristics of soil as a growing medium.
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Classification	Horticulture > Nursery Production
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Available grade	Achieved
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Guidance Information

None

Outcomes and performance criteria

Outcome 1

Describe the properties of growing media.

Performance criteria

1.1 Describe nursery growing media in terms of their types.

Range types include but are not limited to– soil-less container media, soil in the field.

1.2 Describe the nursery growing media in terms of their properties.

Range properties include but are not limited to – aeration, drainage, water retention, nutrient supply, pH level, anchorage and support, health status.

1.3 Describe nursery growing media in terms of their uses.

Range uses include but are not limited to – plant propagation, container-grown plants, field-grown plants.

Outcome 2

Describe the characteristics of soil-less growing media.

Performance criteria

- 2.1 Describe soil-less growing media in terms of their ingredients.
- Range ingredients include but are not limited to – bark, pumice, sand, peat coir fibre, rockwool, hydroponics, organic mix.
- 2.2 Describe soil-less growing media in terms of their properties.
- Range properties include but are not limited to – physical, chemical, and biological.
- 2.3 Describe soil-less growing media in terms of the materials added to soil-less media to improve physical, chemical and biological properties.
- Range materials include but are not limited to – fertilisers, lime, dolomite, wetting agents, water crystals, pest and/or disease controls.
- 2.4 Describe soil-less growing media in terms of the factors that limit their use.
- Range factors include but are not limited to – rewetting difficulties, breakdown of organic ingredients, poor physical properties, cost of ingredients.
- 2.5 Describe soil-less growing media, in terms of the types of plants suitable for growing in them.
- Range evidence of three soil-less media is required.
evidence of two plants for each media are required.
- 2.6 Describe how to avoid or control potential sources of growing medium contamination at preparation, mixing, storage and movement stages.

Outcome 3

Describe the characteristics of soil as a growing medium.

Performance criteria

- 3.1 Describe soil in terms of the physical, chemical, and biological properties.
- 3.2 Describe the materials added to soil in terms of improving physical chemical and biological properties.
- Range materials include but are not limited to – fertilisers, lime, organic matter, pest and/or disease controls.

3.3 Describe a nursery crop in terms of the preparation of soil.

Range preparations may include – cultivation, liming, fertilisers, irrigation, drainage, bed forming.

3.4 Describe soil in terms of the factors that limit its use.

Range may include but is not limited to – soil too wet or too dry, soil depth, soil temperature, poor soil structure, soil contamination, land purchase price.

3.5 Describe soil types in terms of those suitable for field grown nursery crops , and the types of plants suitable for each soil type.

Range evidence of three soil types are required;
evidence of two plant examples for each soil type is required.

Planned review date	31 December 2026
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	23 February 2004	31 December 2014
Revision	2	24 February 2006	31 December 2014
Review	3	19 April 2012	31 December 2024
Review	4	28 April 2022	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 Muka Tangata - People, Food and Fibre Workforce Development Council qualifications@mukatangata.nz if you wish to suggest changes to the content of this unit standard