

Title	Explain crop propagation in accordance with tikanga and crop requirements		
Level	2	Credits	6

Purpose	People awarded this unit standard are able to explain, in accordance with tikanga and crop requirements: the selection and preparation of a crop for propagation; the preparation process of the propagation bed; and the propagation of crops and maintenance of the propagation bed.
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Classification	Whenua > Te Whakamahi Whenua
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Available grade	Achieved
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Guidance Information

- 1 Where local rohe are also occupied by a number of other iwi or hapū, the tangata whenua or mana whenua view should take precedence. Other iwi or hapū views should be encouraged in order to enrich and enhance understanding of key Māori science concepts and practices.
- 2 Assessment against this unit standard can be conducted in a number of ways that may include but is not limited to – oral presentations, visual presentations, written presentations, whakaari, waiata, haka.
- 3 Tikanga may include, but are not limited to:
 - the traditional use of pest control
 - the traditional management of plant disease
 - soil modification and development
 - the use of implements
 - the use of maramataka
 - the process of māhiti
 - the use of karakia
 - whanaungatanga
 - hākari.
- 4 Definitions

Maramataka refers to a system of gardening throughout the lunar months.

Rua/pākoru refers to underground pits.

Whata refers to elevated platform.

Rīwai refers to potato.

Kamokamo refers to marrow.

Kānga refers to maize, corn.

Paukena refers to pumpkin.

Hue refers to gourds, the young hue was used for food, and is similar in texture to the marrow.

Matariki refers to the Pleiades star cluster, which is an indicator/sign for seasonal plant performance for some iwi.

Puanga refers to the Rigel star, which is an indicator/sign for seasonal plant performance for some iwi.

Māhiti refers to sorting and separating according to size and quality.

Crop propagation is the practice of increasing the number of crop plants by sowing their seeds or planting their cuttings, leaves stems and roots from the parent stock.

5 The local species grown in pre-European times is preferred. However, due to the scarcity of some species, more common varieties may be used.

6 Range

Root grown crops may include but are not limited to – kūmara, rīwai, taro, beets, turnips, parsnips, carrots;

evidence of kūmara or rīwai; and one other root grown crop (including the other of kūmara or rīwai) is required.

Seed grown crops may include but are not limited to – kānga, kamokamo, paukena, hue, watermelon, silverbeet, carrots;

evidence of kānga, kamokamo or paukena; and one other seed grown crop (including another from kānga, kamokamo or paukena) is required.

Outcomes and performance criteria

Outcome 1

Explain the selection and preparation of a crop for propagation in accordance with tikanga and crop requirements.

Performance criteria

1.1 The selection criteria of the crop for propagation are explained.

Range may include but is not limited to – size, shape, number of eyes, female, male; evidence of two is required.

1.2 The preparation process of the crop for propagation is explained.

Range may include but is not limited to – quality, preservation; evidence of two is required.

Outcome 2

Explain the preparation process of the propagation bed in accordance with tikanga and crop requirements.

Performance criteria

2.1 The preparation process to make up the propagation bed is explained.

Range may include but is not limited to – environment, soil profile, adequate light, materials; evidence of two is required.

2.2 The preparation process to modify and develop the soil for propagation is explained.

Range may include but is not limited to – aeration, temperature, drainage, irrigation; evidence of two is required.

Outcome 3

Explain the propagation of crops and maintenance of the propagation bed in accordance with tikanga and crop requirements.

Performance criteria

3.1 The propagation season for crops is explained.

Range maramataka, observation from Matariki or Puanga.

3.2 The propagation methods for crops are explained.

Range may include but is not limited to – single layer, spacing, straight line, direction; evidence of two is required.

3.3 The maintenance of the propagation bed is explained.

Range may include but is not limited to – water levels, soil types, weeds, moisture, disease management, pest management, rua/pakoro, whata; evidence of two is required.

Planned review date	31 December 2025
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	21 May 2010	31 December 2017
Review	2	19 November 2015	31 December 2023
Revision	3	31 May 2018	31 December 2023
Rollover and Revision	4	27 June 2019	31 December 2023
Review	5	25 March 2021	N/A

Consent and Moderation Requirements (CMR) reference

0226

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact the NZQA Māori Qualifications Services mqs@nzqa.govt.nz if you wish to suggest changes to the content of this unit standard.