

<b>Title</b>	<b>Grow and pot up plants from stem cuttings</b>		
<b>Level</b>	<b>2</b>	<b>Credits</b>	<b>5</b>

<b>Purpose</b>	<p>This unit standard is for people working, or intending to work, in horticulture, and secondary school and gateway students.</p> <p>People credited with this unit standard are able to: identify the parts of a plant relevant to stem cutting propagation; propagate stem cuttings; pot up, care for, and present stem cuttings; and keep a diary record of plants propagated from stem cuttings.</p>
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<b>Classification</b>	Horticulture > Production Horticulture
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 *Industry practices* refer to accepted horticulture industry techniques, procedures, and standards.
- 2 The stem cuttings must be used to produce the growing on stage of plants in containers.

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### Outcomes and performance criteria

#### Outcome 1

Identify the parts of a plant relevant to stem cutting propagation.

#### Performance criteria

1.1 Identify plant parts.

Range node, internode, terminal (or apical) bud, axillary (or lateral) bud, stem, petiole, lamina, midrib (or main vein).

1.2 Identify stem woodiness.

Range softwood, semi hardwood, hardwood.

#### Outcome 2

Propagate stem cuttings.

**Performance criteria**

- 2.1 Select propagation material for stem cuttings in accordance with industry practices.
- Range healthy growth, pest and disease free, flower and fruit free.
- 2.2 Propagate 20 tip and/or nodal stem cuttings in accordance with industry practices.
- Range giving due consideration to – position of cuts, number of internodes, leaf removal, hormone treatment, cutting medium, labels.
- 2.3 Monitor stem cuttings until well rooted in accordance with industry practices.
- Range moisture levels, pest and disease free.

**Outcome 3**

Pot up, care for, and present stem cuttings.

**Performance criteria**

- 3.1 Pot up stem cuttings when roots are well formed in accordance with industry practices.
- Range may include but is not limited to – potting bags, pots, labels.
- 3.2 Monitor potted up stem cuttings in accordance with industry practices.
- Range moisture levels, pest and disease free.
- 3.3 Present potted up stem cuttings with evidence of at least three new internodes of growth on each cutting (growing on stage) in accordance with industry practices.
- Range minimum of 12 cuttings.

**Outcome 4**

Keep a diary record of the plants propagated from stem cuttings.

**Performance criteria**

- 4.1 Record procedures undertaken in the preparation of the stem cuttings for propagation.

- 4.2 Record weekly care and maintenance of stem cuttings up until the potted cuttings reach the stage of three internodes of growth on each cutting.

Range may include but is not limited to – watering, plant and root growth, pests and diseases, other environmental conditions.

<b>Planned review date</b>	31 December 2023
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#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	26 November 2007	31 December 2020
Review	2	28 February 2019	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0032
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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](mailto:standards@primaryito.ac.nz) if you wish to suggest changes to the content of this unit standard.