

ASSESSMENT GUIDELINES

Unit 20558

Propagate plants by cuttings

Level 4, Credit 10, version 2

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Unit standard 20558

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Level of performance required for this unit standard

This is a level 4 unit standard. At this level trainees are expected to demonstrate the following abilities when completing assessment tasks:

- To work under broad guidance, independently; with complete responsibility for the standards of the outcome achieved.
- To apply the technical skills, supporting knowledge, and innovation to complete the task to the specified standard, in a variety of familiar and unfamiliar contexts.
- To analyse and interpret information, and make an informed judgement.

Assessors may consider linking the assessment of this unit standard with assessment for:

20556: Demonstrate knowledge of plant propagation
20557: Propagated plants from seed
20559: Propagate herbaceous plants by division
20572: Bud and graft young plants

Workplace assessment:

For guidelines on Workplace Assessment, please refer to the NZHITO Workplace Assessors Manual, and for further information, please contact: NZHITO, PO Box 8638, Christchurch, Ph 03 9644 735, Fax 03 9644 737, Website: www.hortito.org.nz

Entry information:

Recommended: Unit Standard 20556, *Demonstrate knowledge of plant propagation*, or demonstrate equivalent knowledge and skills.

Special notes:

This unit standard replaces unit standard 817.

Workplace procedures refers to verbal or written instructions to staff on procedures for the worksite and equipment.

Legislation relevant to this unit standard includes, but is not limited to, the Health and Safety in Employment Act 1992, the Resource Management Act 1991, and their subsequent amendments.

Work may involve exposure to chemical, dangerous or hazardous substances. Safety procedures are observed in accordance with NZS 8409:2004, *Management of Agrichemicals*, available from Standards New Zealand <http://www.standards.co.nz> or the NZ Agrichemical Education Trust, <http://www.growsafe.co.nz>.

Learners should recognise the rights of plant breeders and licensed growers under the Plant Variety Rights Act 1987, trademarks, copyright, patents or any other protection method, and understand the responsibilities of propagators to observe those rights.

**Unit 20558: Propagate plants by cuttings
(Apprentice copy)**

ELEMENT	Competent	Range of evidence an assessor should consider
Element 1 Manage stock plants	Yes/No	<ul style="list-style-type: none"> • Maintain stock plants according to workplace practices to maximise production of suitable cutting material and to prevent competition from pests, diseases or weeds. • Monitor stock plants for trueness to type.
Element 2 Select and prepare cutting material	Yes/No	<ul style="list-style-type: none"> • Select and prepare two examples each for three cutting types from – herbaceous, softwood, semi-hardwood, evergreen hardwood, deciduous hardwood, and leaf cuttings. • For the cutting types: • Identify, select and remove suitable cutting material from stock plants at the appropriate time of year. • Store cutting material in an environment that prevents deterioration before processing. • Make at least 50 cuttings of each cutting type using techniques suitable for the plant species and type of growth. • Treat cuttings to encourage root production using a method that is suitable for the plant species and cutting type. Treatment may include: wounding, root promoting agent, or no treatment as necessary. • Select suitable rooting medium and container for the plant species, cutting type, and propagation environment. • Set cuttings to a depth and spacing appropriate for growth and cutting type. • Select a suitable propagation environment that will maximise root development and cutting survival. The environment may include: open bench, polythene cover, misting or fogging unit, bottom heat, outdoor bed, direct-set into field.
Element 3 Manage the propagating environment	Yes/No	<ul style="list-style-type: none"> • Maintain a suitable environment for the plant species and cutting type. The environment to include: light level, air temperature, humidity level, propagating medium temperature, and propagating medium moisture. • Monitor, adjust and maintain equipment as necessary to achieve the required humidity. Equipment can include: <ul style="list-style-type: none"> • misting or fogging unit, polythene cover, greenhouse environment. • Monitor, adjust and maintain equipment as necessary to achieve the required medium temperature. Equipment can include: heating pads or cables, thermostats. • Monitor cutting material for likely problems and take corrective action. Problems include: fallen leaves, dead cuttings, pests, diseases, variations in environmental conditions.
Element 4 Harden off rooted cuttings	Yes/No	<ul style="list-style-type: none"> • Monitor cuttings for root development. • Harden cuttings off according to workplace practices. Workplace practices may include: humidity reduced, air temperature reduced, propagation medium temperature reduced. • Remove rooted and hardened cuttings to growing area where applicable.
Element 5 Keep records of propagation by cuttings	Yes/No	<ul style="list-style-type: none"> • Label and identify cutting material in accordance with workplace practices. Label may include; plant name, date and batch. • Records of propagated plants are kept according to workplace practices. Records may include: species and/or cultivar, source of cuttings, collection date, condition of cutting material, date cuttings made, rooting treatments used, cutting environment, date of rooting, hardening off, date into containers or lined out.

(Name of Apprentice)

is **Competent / Not yet competent** in Unit Standard 20558 (version 2)

Signed (Assessor): _____

WPA Registration Number: _____ Date: _____

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Please send this page to your NZHITO Regional Manager, who will forward it to National Office to register the credits on your NZQA Record of Learning.

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