

ASSESSMENT GUIDELINES

Unit 20569

Control the nursery growing environment

Level 4, Credit 5, version 2

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Unit standard 20569

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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.

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

Special notes:

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://standards.co.nz>, or the NZ Agrichemical Education Trust <http://growsafe.co.nz>.

**Unit 20569: Control the nursery growing environment
(Apprentice copy)**

ELEMENT	Competent	Range of evidence an assessor should consider
Element 1 Operate greenhouse environmental controls.	Yes/No	<ul style="list-style-type: none"> • Identify two of - heating, cooling, and humidity controls, and explain how they operate. • Determine the greenhouse environmental conditions needed to suit the plant's requirements. Environmental conditions should cover temperature, humidity, and light levels. • Give an explanation of how temperature, humidity, air movement, and plant water loss, are related. • Check and operate control system to maintain greenhouse environment within optimum range. Control system can be either manual or automatic. • Monitor the greenhouse environment to ensure conditions are maintained within optimum range. Record environmental information (includes maximum and minimum air temperatures and humidity). • Explain how external temperature, wind strength and direction, and humidity affect the operation of the ventilation system.
Element 2 Manage water levels in growing media.	Yes/No	<ul style="list-style-type: none"> • Determine the water requirements for one of – indoor container plants, outdoor container plants, field-grown plants. • Identify irrigation system components and explain their operation. Either a manual system or an automatic system. • Operate the irrigation system to maintain the available water in the growing media at levels suitable for the plants grown. • Monitor the growing media to ensure the media are not too wet or too dry for the plants grown. • Maintain irrigation records according to workplace practices. These may include date, blocks irrigated, timing, litres used, weather conditions.
Element 3 Manage light levels.	Yes/No	<ul style="list-style-type: none"> • Identify the plant's light requirements and select a method of achieving this. Methods can include - shading to reduce light levels, use of lighting to extend day length, black out covers to exclude light. • Manage light levels to optimize plant growth and achieve required outcomes. Plants are undamaged from incorrect light levels, plant production target achieved. • Maintain records, where lighting or blackout covers are used, according to workplace practices. These may include date, plants names, modification, plant house, bench or block number, timing, outcomes.
Element 4 Identify wind protection requirements.	Yes/No	<ul style="list-style-type: none"> • Identify the wind protection requirements of plants, or plant growing areas and structures. • Select a method of wind protection. These can include artificial shelter and/or natural systems.

_____ (Name of Apprentice)

is **Competent / Not yet competent** in Unit Standard 20569 (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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