



Australian Government

AHCPER223 Produce new plants for a permaculture garden system

Release: 1

AHCPER223 Produce new plants for a permaculture garden system

Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 9.0.

Application

This unit of competency describes the skills and knowledge required to produce plants for a permaculture garden system using propagation techniques and basic growing methods, including nutrition and potting media, suitable for small scale propagation systems.

The unit applies to individuals who work under general supervision and exercise limited autonomy with some accountability for their own work. They undertake defined activities and work in a structured context.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Permaculture (PER)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to propagate plants	1.1 Identify plants to be reproduced and select propagation method 1.2 Source and acquire suitable plant materials for propagation 1.3 Select, check and prepare materials and resources 1.4 Prepare containers with media according to selected propagation method

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.5 Implement hygiene practices according to workplace biosecurity procedures 1.6 Identify hazards and implement controls according to workplace health and safety procedures
2. Undertake propagation activities	2.1 Prepare propagation material according to propagation plan 2.2 Place prepared propagation material into growing environment according to selected propagation method 2.3 Label propagated plants according to workplace procedures 2.4 Record propagation activity according to workplace procedures
3. Maintain health of plants during propagation	3.1 Maintain optimal growing environment to ensure successful plant production outcomes 3.2 Monitor health of plants under propagation and implement remedial action where risk is identified 3.3 Check plants under propagation for indicators of success 3.4 Transfer successfully propagated plants into subsequent growing conditions according to propagation method and propagation plan 3.5 Prepare propagated plants for transfer into final growing position according to plant species requirements
4. Maintain garden propagation system year-round	4.1 Implement seasonal biosecurity and hygiene practices for propagation activities according to workplace procedures 4.2 Monitor and maintain mother stock for propagation purposes 4.3 Maintain stocks of resources required for seasonal propagation activities 4.4 Update records of propagation outcomes according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
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Skill	Description
Reading	Interpret and consolidate propagation plan to inform propagation plants, methods and treatments required
Writing	Prepare accurate records of propagation plants, their names and propagation activities and treatments

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCPER223 Produce new plants for a permaculture garden system	AHCPER214 Propagate plants for a permaculture garden system	Change to title to emphasise difference to commercial nursery propagation Changes to Application for clarity Changes to structure of Elements and Performance Criteria for clarity Changes to Performance Evidence, Knowledge Evidence and Assessment Conditions for clarity Addition of Foundation Skills	Not equivalent

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCPER223 Produce new plants for a permaculture garden system

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has produced new plants for a permaculture garden system and has:

- identified method of propagation for at least 10 different species
- selected and prepared materials and resources, including:
 - implemented hygiene practices
 - prepared containers and media
 - sourced plant propagation material
- propagated plants safely using at least 3 of the following techniques:
 - seeds
 - cuttings
 - division
 - grafting/budding
 - layering
- maintained the health of new plants and mother stock, including:
 - watering
 - monitored and responded to pests, diseases or nutrient problems
 - monitored and responded to environmental condition in growing environment
- implemented seasonal propagation maintenance activities
- maintained accurate labelling and records during propagation activity.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- permaculture principles and practices related to propagation including:

- using reclaimed or reused containers (suitably cleaned to avoid cross-contamination)
- labelling systems using reclaimed materials
- maintaining rare and unusual varieties
- using edges and valuing marginal or unusual plants in micro-climates
- sharing and swapping to increase biodiversity and mutual wellbeing
- preserving provenance of locally indigenous species
- testing and trialling for new plants or resistant varieties
- global food plant preservation, including seed saving
- importance of hygiene and biosecurity in propagation practices
- principles of sustainable horticultural practices
- propagation techniques, including:
 - seed sowing
 - tip and softwood
 - semi hardwood cuttings
 - hard wood cuttings
 - root cuttings
 - layering
 - division
 - grafting, including whip and tongue, saddle, wedge and budding
- maintaining optimum growing environment, including:
 - propagule treatments
 - media moisture
 - humidity
 - basic plant nutrition
- potting mixes suitable for propagation in a garden setting, including:
 - compost and worm casting mixes
 - sieved and graded sands
 - blends used for different purposes or different times of year
 - sphagnum moss
- common conditions for propagation in permaculture systems, including:
 - direct into prepared beds
 - containers and pots
 - greenhouses, cloches and cold frames
 - shade and lathe houses
 - directly on existing plants
- basic plant growth and development
- workplace health and safety requirements relevant to plant propagation
- methods of waste disposal causing minimal impact on the environment.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a permaculture garden system or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - propagation tools and equipment
 - personal protective equipment
 - plant propagation materials specified in the performance evidence
 - growing environments for propagation methods
- specifications:
 - workplace procedures and processes
 - workplace instructions and propagation plans
- timeframes:
 - according to season specified for plant species propagation.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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