



Australian Government

Assessment Requirements for AHCPER225 Assist with garden soil health and plant nutrition

Release: 1

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Modification History

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

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, on at least one occasion, assisted with maintaining garden soil health and plant nutrition in a permaculture system and has:

- collected soils samples and conducted field tests to determine basic soil conditions, which must include each of the following tests:
 - texture
 - pH
 - organic matter
 - soil life
- conducted observations of plant growth to identify possible soil and health problems, which must include:
 - health of plant growth
 - insect activity
 - animal activity
 - symptoms of organisms
 - common nutrient deficiencies in leaves
 - common signs of plant pathogens, including fungal, bacterial or viral
- applied soil additives to improve soil according to organic and permaculture practices
- protected soil to maintain moisture and overall soil health.

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 soil health and plant nutrition, including:
 - working with natural soils rather than importing soil

- soil as an ecosystem
- soil as biomass and carbon capture and storage
- principles of sustainable horticultural practices
- soil testing techniques, including:
 - jar test for texture
 - ribbon test and ball test
 - pH testing
 - surface evaporation test
 - worm count
- basic plant nutrition
- waste water and plant health, including:
 - types of waste water
 - plant problems from waste water
 - common symptoms
 - basic tests and observations for waste water issues
- allowable additives to improve soils, including:
 - compost and worm castings
 - compost teas
 - rock dust
 - gypsum
 - green manures
 - manures/animal bedding materials
 - leaf mould
 - plants – green manures, nurse plants
 - companion planting
 - dynamic accumulators
 - chop and drop
 - nutrient trapping systems
 - greywater use
 - organically certified products
- permaculture planting techniques to improve plant growth, including:
 - guilds
 - nurse plants
- common soil-borne pests, diseases and nutrient problems and their symptoms
- methods of waste disposal causing minimal impact on the environment.
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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:
 - hand tools and equipment
 - soil amendments and additives
 - basic test equipment and consumables
- specifications:
 - workplace instructions and procedures
- relationships:
 - supervisor.

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

Links

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