



Australian Government

AHCPER215 Assist with garden soil health and plant nutrition

Release: 1

AHCPER215 Assist with garden soil health and plant nutrition

Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Application

This unit of competency describes the skills and knowledge required to assist with garden soil health and plant nutrition using simple methods and without costly equipment. It requires knowledge of simple soil testing techniques and how to improve soil health and plant nutrition organically.

All work is carried out to comply with workplace procedures.

This 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 occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

Nil.

Unit Sector

Permaculture (PER)

Elements and Performance Criteria

Element	Performance criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Undertake simple soil assessment tests	1.1 Prepare soil samples for testing 1.2 Use simple techniques to check the texture, pH, organic matter and soil life in the soil samples 1.3 Use simple techniques to read the probable soil condition using plant growth and insect or animal activity

Element	Performance criteria
2. Add organic or allowable nutrients to improve soil	2.1 Determine needs of soil for improvement 2.2 Add allowable additives such as compost, rock dust, manure and compost tea to improve soil 2.3 Use planting techniques such as green manures, companions, guilds and nurse plants to improve soils and plant nutrition 2.4 Protect the soil with mulch to maintain moisture and discourage unwanted growth
3. Monitor soil health	3.1 Monitor the health of the soil through the seasons 3.2 Ensure soils are not over dry or over wet 3.3 Avoid salting or greywater sodicity if watering with reused water 3.4 Regularly check for health of soil organisms, nutrient deficiency in leaves, and signs of pathogen fungal, bacterial or viral action on plants 3.5 Monitor soil improvement and plant nutrition over time

Foundation Skills

Foundation Skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Unit Mapping Information

New unit.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCPER215 Assist with garden soil health and plant nutrition

Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Performance Evidence

The candidate must be assessed on their ability to integrate and apply the performance requirements of this unit in a workplace setting. Performance must be demonstrated consistently over time and in a suitable range of contexts.

The candidate must provide evidence that they can:

- undertake simple soil assessment tests
- add organic or allowable nutrients to improve soil
- Protect soil to maintain moisture and overall soil health

Knowledge Evidence

The candidate must demonstrate knowledge of:

- permaculture principles and practices related to soil health and plant nutrition, such as:
 - 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, such as:
 - jar test for texture
 - ribbon test and ball test
 - pH testing
 - surface evaporation test
 - worm count
- basic plant nutrition
- allowable additives to improve soils, such as:
 - compost and worm castings
 - compost teas
 - rock dust
 - gypsum

- green manures
- manures/animal bedding materials
- leaf mould
- plantings – green manures, nurse plants
- companion planting
- dynamic accumulators
- chop and drop
- nutrient trapping systems
- greywater use
- organically certified products
- methods of waste disposal causing minimal impact on the environment

Assessment Conditions

Assessors must satisfy current standards for RTOs. Assessors must also hold a nationally accredited Certificate III (or higher) in Permaculture to assess this unit of competency and/or have completed a Permaculture Design Course (PDC) and/or have completed the Permaculture Demonstrator Skill Set.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>