



Australian Government

Department of Education, Employment and Workplace Relations

AHCSOL201A Determine basic properties of soil and/or growing media

Release: 1

AHCSOL201A Determine basic properties of soil and/or growing media

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers the process of determining the basic properties of soil or soil-less growing media and defines the standard required to: undertake basic soil/media analysis descriptive tests for soil texture, salinity and pH; use basic proprietary soil testing equipment for testing pH and salinity; determine basic soil structure with a view to using soil structure ameliorants.
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Application of the Unit

Application of the unit	This unit applies to determining basic properties of soil/growing media and is usually conducted within established routines, methods and procedures.
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Not Applicable

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
1. Collect soil/media samples for testing	1.1. Tools and materials for collecting soil/media samples are prepared. 1.2. Area from which soil/media samples are to be collected is identified from workplace records or supervisors instructions. 1.3. Services are located using site plans and in consultation with the supervisor. 1.4. Occupational Health and Safety (OHS) hazards are identified, risks assessed and controls implemented and reported to the supervisor. 1.5. Suitable safety equipment and Personal Protective Equipment (PPE) are selected, used and maintained. 1.6. Samples are taken randomly from the designated area according to recognised sampling techniques and are prepared for on site or off site analysis 1.7. Samples are labelled and recorded according to organisational procedures.
2. Perform basic soil/media test	2.1. Soil profile is determined, where appropriate. 2.2. Soils/media are tested or inspected for physical properties. 2.3. Soils/media is tested for chemical properties. 2.4. Results are recorded according to organisational procedures.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- collect soil/media samples
- perform basic soil/media tests
- interpret results from own or laboratory results
- record and store information
- use literacy skills to follow sequenced written instructions and record information accurately and legibly
- use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for

REQUIRED SKILLS AND KNOWLEDGE

clarification and seeking advice from supervisor

- use numeracy skills to estimate, calculate and record routine workplace measures
- use interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities.

Required knowledge

- soil sampling techniques
- soil/media physical properties
- soil/media chemical properties
- soil/media plant relationships
- basic soil/media field tests
- interpreting laboratory results
- techniques to ameliorate soil properties.

Evidence Guide

EVIDENCE GUIDE	
The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy holistically all of the requirements of the performance criteria and required skills and knowledge and include achievement of the following: • undertake basic soil/media analysis descriptive tests for soil texture, salinity and pH • use basic proprietary soil testing equipment for testing pH and salinity • determine basic soil structure with a view to using soil structure ameliorants.
Context of and specific resources for assessment	Competency requires the application of work practices under work conditions. Selection and use of resources for some worksites may differ due to the regional or enterprise circumstances.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole.	
Soils may include:	• all types of soils and growing media used for commercial production.

Unit Sector(s)

Unit sector	Soils and media
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Co-requisite units

Co-requisite units		

Competency field

Competency field	
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