AHCPCM303A Identify plant specimens

Release: 1

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Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers the process of identifying an unknown plant specimen and defines the standard required to: capture relevant morphological features of a plant, record qualitative and quantitative data; use comparative techniques to define progress towards identification; use indications of health, environmental influences and location to assist identification; construct a plant database; document a report of the identification process; name unknown plant specimens.

Application of the Unit

Application of the unit	This unit applies to the process of inspection and description of the features and attributes of a plant for the purpose of plant identification and providing information to a client or organisation in specialist roles within in each of the industry sectors and applies in addition to the existing standards referencing plant identification in a general application across the industry sectors.

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		

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Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Not Applicable

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
1. Observe the plant specimen	1.1. Immediate recognition of overall features is used to remember the plant name and inform client. 1.2. Information retrieved from memory is recorded for common and botanical names. 1.3. Data is recorded in a format allowing further process of observation of features. 1.4. Specimens yet to be identified fully continue through the process of identification.
2. Inspect plant morphological features	2.1. Visual inspection of the form and structures of the specimen is described in botanical terms. 2.2. Qualitative and quantitative data are recorded in a format listing the main observable features. 2.3. Photographs of the main features are taken and stored in a database for future reference. 2.4. All relevant available senses are used to assist in the observation procedure. 2.5. Useful identifying attributes of the leaf, flower, vegetative growth, fruiting body, stem, bark and habit are recorded. 2.6. Identity of specimen is recorded where known at this point. 2.7. Unknown specimen is analysed for plant group or family characteristics from available sources of knowledge and information gained is recorded.
3. Determine status of health	3.1. Plant specimen is inspected for health and general condition. 3.2. Observations are used to identify any diseases, pests or deficiencies indicative of plant groups. 3.3. Discussion and research are used to determine the current location, environmental influences and distribution of the specimen where known. 3.4. Relevant data are recorded and evaluated and identification recorded where possible and the client or organisation informed of the result.
4. Identify the specimen	4.1. Database is constructed of plants and their characteristics using digital methods, collection of physical specimens and associated data or illustrations of specimens and key features. 4.2. Research, reference material, field guides and taxonomic keys are used to define a closer identification by comparison of generic characteristics and all results of the process are recorded. 4.3. Photographs or illustrations or physical specimens

ELEMENT	PERFORMANCE CRITERIA
	are inspected and compared to similar specimens in the reference material and database. 4.4. Unknown specimens are analysed for specific characteristics and identified to species and cultivar level where possible and named.
5. Report on the process results	5.1. Compile the information data observed for the plants morphological features throughout the process. 5.2. Label all the information data recorded and highlight key identifying features observed in the process. 5.3. Document a report of the identification process and list the compiled data. 5.4. The client or organisation is informed of the results of the identification process.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE
This section describes the skills and knowledge required for this unit.
Required skills
- recognition of plants common to the region   - use digital cameras   - use comparative techniques   - use a database   - determine the health of plants   - research multiple sources of reference material   - compile a database of plant specimens and characteristics   - use taxonomic keys   - identify and label key features of plant morphology   - use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required   - use numeracy skills to estimate, calculate and record routine workplace measures   - use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities.
Required knowledge
- botany, plant morphology, physiology and taxonomy   - methods of data capture

REQUIRED SKILLS AND KNOWLEDGE

- use and configuration of a database
- plant identification techniques
- problem-solving techniques
- soil characteristics particularly in relation to the local region
- symptoms of plant pests and diseases
- basic physiology and life cycle of pests and diseases.

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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: • recognise an unknown plant • capture relevant morphological features of a plant • record qualitative and quantitative data • use comparative techniques to define progress towards identification • use indications of health, environmental influences and location to assist identification • construct a plant database • document a report of the identification process • name unknown plant specimens.
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.	
Plants may include:	• all plant species and cultivars.
Plant morphology features include:	• plant habit • duration • vegetative growth • floral parts • epidermis and periderm texture

RANGE STATEMENT	
	• specialisations • pollination and fertilization • fruit types • fruiting bodies • seeds and seedless reproduction.

Unit Sector(s)

Unit sector	Plants

Co-requisite units

Co-requisite units		

Competency field

Competency field	