



Australian Government

Department of Education, Employment and Workplace Relations

AHCSDT402A Prepare and maintain a seed reference collection

Release 1

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Modification History

Release	TP Version	Comments
1	AHC10v4	Initial release

Unit Descriptor

This Unit covers the preparation and maintenance of a seed reference collection that can be used in the identification of seeds and which enables the quality control of laboratory procedures. This Unit does not include the botanical identification of seeds.

Application of the Unit

This Unit applies to senior seed analysts working within enterprise guidelines. In general, they oversee the preparation of samples for testing; conduct and supervise specified tests in accordance with enterprise requirements; interpret and report results; maintain record-keeping systems; and have responsibility for overall laboratory operations, the supervision of staff, and implementation of quality assurance procedures.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Nil.

Employability Skills Information

This Unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a Unit of Competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

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|---|--|
| 1. Acquire responsibility for a seed reference collection | 1.1 Standard operating procedures for maintaining a seed reference collection are reviewed.
1.2 Existing seed reference materials are checked to ensure labels and records are up to date.
1.3 Seed collection complies with industry protocols .
1.4 Procedures for introducing new seeds to the collection are confirmed.
1.5 Record keeping and staff access arrangements are established. |
| 2. Maintain a seed reference collection | 2.1 Storage conditions are reviewed to ensure that they comply with SOPs.
2.2 Storage conditions are monitored to ensure seeds remain in good condition.
2.3 Collection and records are updated as new seeds are added.
2.4 Indicators of deterioration of seed in collection are advised to management. |
| 3. Update the reference collection | 3.1 Information about seed is documented and added to the reference collection.
3.2 Reference collection is updated as new seeds are identified according to enterprise guidelines.
3.3 New materials are sourced as required to maintain currency and relevance of the collection. |
| 4. Provide seed reference materials on request | 4.1 Seed reference material is provided, in accordance with enterprise policy , with action taken to prevent contamination.
4.2 External requests for access to the seed reference collection are verified and approved by manager before being processed.
4.3 Records of access to collection and removal of seeds from collection are maintained. |
| 5. Maintain a safe work environment | 5.1 Safety and biosecurity protocols are observed when handling and processing seed reference materials.
5.2 Redundant, diseased and outdated seed is disposed of safely and appropriately. |

Required Skills and Knowledge

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

Required skills include:

Ability to:

- maintain seed specimens so that the reference characteristics and attributes are stable in storage and retrieval
- keep and update records
- communicate appropriately with management, staff and external parties.

Required knowledge includes:

Knowledge of:

- seed reference collections - what they are, when and why they should be used
- storage requirements of different seed varieties
- quarantine and isolation procedures
- taxonomic nomenclature
- seed biology
- enterprise Standard Operating Procedures (SOPs)
- relevant health, safety and environment requirements.

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: • maintain and update a seed collection • source new materials • keep records • communicate with others.
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.
Method of assessment	This Unit should be assessed together with core Units and other Units of Competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency of performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

The range statement relates to the Unit of Competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
<i>Industry protocols</i> may include:	ISTA's "Universal List of Species"; laboratory's scope of accreditation.

Unit Sector(s)

Seed Testing