



Australian Government

AHCBAC416 Save, prepare and store agricultural seed

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 7.0.

Application

This unit of competency describes the skills and knowledge required to determine the seed to be saved, save seed from harvest, and prepare and store agricultural seed for sowing or sale.

The unit applies to individuals who take responsibility for own work and for the quality of the work of others. They use discretion and judgement in the selection, allocation and use of available resources.

Licensing or certification for the use of fumigants and poison baits is strictly controlled in Australian states and territories. Users must check with their relevant regulatory authority before use.

Pre-requisite Unit

Nil

Unit Sector

Broad Acre Cropping (BAC)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Select seed from agricultural crops	1.1 Calculate the quantity of seed required for future season's crops 1.2 Calculate the area of crop needed to produce the required quantity of seed 1.3 Select a portion of current crop to be used as future crop seed 1.4 Check and record the soil type in selected portion of crop 1.5 Identify equipment to be used in seed movement, testing and

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	storage 1.6 Implement measures to improve seed and plant health, vigour and uniformity within the selected area 1.7 Identify treatments required for crop and subsequent detrimental environmental impact 1.8 Implement workplace health, safety and biosecurity policies and procedures
2. Evaluate and grade seed	2.1 Assess grain variety for its location, soil, and current workplace marketing requirements' suitability following harvest 2.2 Research information regarding new varieties or trial results for input into management decision-making 2.3 Grade the seed to the required size 2.4 Apply fungicidal and insecticidal dressings to the seed according to workplace procedures 2.5 Collect, prepare and forward test samples according to laboratory procedures and industry standards 2.6 Collect and maintain records, and report outcomes according to workplace procedures
3 Store seed	3.1 Select and prepare facilities for hygienic storage of seed 3.2 Transfer seed to storage facility according to workplace and biosecurity procedures 3.3 Ensure seed is stored under conditions that maintain quality, viability and purity 3.4 Check seed in long-term storage for quality factors and viability according to schedule specified in seed storage program 3.5 Collect, prepare and forward seed samples for laboratory testing and analysis according to laboratory and sampling procedures 3.6 Create and maintain records of seed storage, tests and inspections according to seed storage program 3.7 Monitor condition of storage facilities using schedule and methods specified in seed storage program 3.8 Implement corrective action to maintain seed quality and biosecurity
4. Collect and deliver	4.1 Collect or deliver seed according to agreed terms and conditions

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
seed	and biosecurity procedures 4.2 Ensure seed sold or purchased conforms to local State and Federal legislative and regulatory requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Analyse seed variety trial results, journals, documentation and digital media to identify new seed varieties suitable for future crops
Writing	Create, develop and maintain accurate records for seed selection, preparation and storage

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCBA416 Save, prepare and store agricultural seed	AHCBA407 Save, prepare and store agricultural seed	Edited Application for clarity Minor changes and consolidation of Performance Criteria for clarity Foundation Skills refined Performance Evidence and Knowledge Evidence clarified Amended structure of Assessment Conditions	Equivalent

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -

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

Assessment Requirements for AHCBA416 Save, prepare and store agricultural seed

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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 stored agricultural seed for sowing future crop or sale and has:

- selected and applied seed tests to determine seed quality including:
 - moisture
 - protein
 - falling numbers
 - screenings
 - damaged seed
- sampled seed according to laboratory procedures
- applied pre and post-harvest treatments for seed
- identified and utilised equipment required for seed movement, testing and storage
- identified varieties from growth patterns
- identified weed seeds and contaminants
- identified pests in stored grain and initiated control measures
- performed the following calculations for seed storage:
 - volume of seed required
 - capacity of storage available and required for seed storage
 - area of crop required to produce seed based on health, vigour and grain size
 - ratios of chemical use
- created and maintained records for traceability, including:
 - results of test on seeds
 - seed provenance and varieties
 - pest control measures
 - seed storage locations and movement
 - application of treatments to stored grain and facilities

- movement of grain while in storage
- inspections, sampling and testing of grain
- graded and tested seed and interpreted results
- collected and maintained records
- stored and maintained the quality of seed for use in following season
- implemented workplace health, safety, biosecurity and environmental policies.

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:

- seed varieties and their identification
- seed treatment and cleaning measures
- tests commonly performed on seeds for storage and quality assessment, including:
 - moisture
 - protein
 - falling numbers
 - screenings
 - damaged seed
 - seed health tests
- sources of seed to purchase and expected terms, conditions and standards
- inoculation treatments and seed dressings used to protect seed and promote seed germination
- records and documentation required for traceability and handling of seed
- storage techniques and requirements for seed and grain including:
 - silo
 - storage bags
 - sheds and bunkers
 - underground pits
- biosecurity controls and codes of practice
- relevant legislation and regulations relating to:
 - health and safety
 - contractor engagement
 - chemical use and application
 - vehicle and plant operation and use
 - use, handling and sale of seed
- national and international standards for commercial seed production
- site workplace health and safety management practices and procedures, including:
 - minimise noise
 - odours
 - debris from grain storage operations

- dust and fire risk
- working at heights and confined spaces with storage bins
- power lines and elevated equipment safety.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated on a broadacre farm or grain processing plant, or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - seed and storage facilities
 - tools, equipment and machinery for transporting and transferring seed
 - personal protective equipment
 - digital or analogue record keeping system
 - chemicals and measuring and application equipment
- specifications:
 - specific workplace policies, procedures and forms
 - manufacturer operating instructions for equipment and machinery
 - safety data sheets (SDS)
 - workplace instructions
 - terms and conditions for supply or purchase of seed

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

Links

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