



Australian Government

Department of Education, Employment and Workplace Relations

FPIFGM2201B Collect seed

Release: 1

FPIFGM2201B Collect seed

Modification History

Not Applicable

Unit Descriptor

Unit descriptor This unit describes the outcomes required to collect, treat and store seed

Compliance with licensing, legislative, regulatory or certification requirements may be required in various jurisdictions

This unit replaces FPIFGM2201A Collect seed

Application of the Unit

Application of the unit The unit involves collecting seed in a forest environment setting

The skills and knowledge required for competent workplace performance are to be used within the scope of the person's job and authority

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Not Applicable

Employability Skills Information

Employability skills 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

ELEMENT	PERFORMANCE CRITERIA
1. Prepare to collect seed	1.1. Applicable <i>occupational health and safety</i> (OHS), <i>environmental</i> , <i>legislative</i> and <i>organisational requirements</i> relevant to collecting seed are identified and followed 1.2. <i>Work order</i> is reviewed and clarified with <i>appropriate personnel</i> 1.3. Site <i>environmental protection measures</i> are followed in line with relevant legislation and regulations 1.4. Potential locations for the collection of required seeds are identified and required <i>approvals</i> are sought and obtained from <i>relevant authorities</i> 1.5. <i>Equipment and resources</i> appropriate to work requirements are selected and checked for operational effectiveness in line with manufacturer recommendations 1.6. Seed collecting operations are checked to ensure safe working conditions and <i>planned</i> in line with site procedures 1.7. <i>Communication</i> with others is established and maintained in line with OHS requirements
2. Select and assess seed	2.1. Plant species and condition are visually assessed and checked to ensure the collection of healthy seeds 2.2. Method of seed collection is selected and applied without causing damage to <i>health of parent plant</i> 2.3. Seed is collected from a range of plants and from different areas of plants to maintain genetic diversity 2.4. Seed is placed in clean containers and accurately <i>labelled</i> in line with industry, site and organisational requirements
3. Clean and store seed	3.1. Seed is <i>separated</i> from other materials, weighed and stored in line with species requirements and site procedures 3.2. <i>Seed treatment</i> is applied to prevent deterioration in line with seed species and site procedures 3.3. <i>Seed information</i> is accurately recorded in line with site procedures 3.4. Seed is <i>packaged</i> for storage in line with industry, legislative and organisational requirements 3.5. Seed collection information and results are <i>recorded and reported</i> in line with site procedures

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level required for this unit.

Required skills

- Technical skills sufficient to use and maintain relevant equipment and resources; efficiently and safely carry out seed collecting procedures; identify a range of seed species and apply accurate identifying information; use a range of seed collection methods and related equipment
- Communication skills sufficient to use appropriate communication and interpersonal techniques with colleagues and others
- Literacy skills sufficient to record and maintain information, including details of seed species, weight and place of origin
- Numeracy skills sufficient to apply appropriate mathematical techniques to calculate seed weights and quantities
- Problem solving skills sufficient to review and identify work requirements; identify problems and equipment faults; demonstrate appropriate response procedures

Required knowledge

- Applicable commonwealth, state or territory legislation, regulations, standards, codes of practice and established safe practices relevant to the full range of processes for collecting seed
- Environmental protection requirements, including the safe disposal of waste material and returning the environment to its original or near to original condition on completion of activity
- Organisational and site standards, requirements, policies and procedures for collecting seed
- Environmental risks and hazards
- Procedures for minimising environmental impact
- Range of seed species and appropriate collection, treatment and packaging processes, including storage requirements for different seed species
- Types of diseases and pests likely to infect a range of seed species
- Established communication channels and protocols
- Problem identification and resolution strategies, and common fault finding techniques
- Types of tools and equipment, and procedures for their safe use and maintenance
- Appropriate mathematical procedures for estimating and measuring, including calculating time to complete tasks
- Procedures for recording and reporting workplace information

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

A person who demonstrates competency in this unit must be able to provide evidence that they can apply safe and efficient techniques to collect, treat and store a range of seed species in line with species requirements and organisational guidelines

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, and satisfy, all of the requirements of the elements of this unit and include demonstration of:

- following applicable commonwealth, state or territory legislative and regulatory requirements and codes of practice relevant to collecting seed
- following organisational policies and procedures relevant to collecting seed
- safely and efficiently using and maintaining seed collecting equipment and resources
- treating and storing seed in line with site and industry specifications
- recording seed collection information and results, and maintaining workplace information

Context of and specific resources for assessment

- Competency is to be assessed in the workplace or realistically simulated workplace
- Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
- Assessment of required knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to follow relevant regulatory or Australian Standards requirements
- The following resources should be made available:
 - workplace location or simulated workplace
 - materials and equipment relevant to undertaking work applicable to this unit
 - specifications and work instructions

Method of assessment

- Assessment must satisfy the endorsed Assessment Guidelines of the FPI11 Training Package

EVIDENCE GUIDE

- Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of required knowledge
- Assessment must be by direct observation of tasks, with questioning on required knowledge and it must also reinforce the integration of employability skills
- Assessment methods must confirm the ability to access and correctly interpret and apply the required knowledge
- Assessment may be applied under project-related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency
- The assessment environment should not disadvantage the candidate
- Assessment practices should take into account any relevant language or cultural issues related to Aboriginality, gender or language backgrounds other than English
- Where the participant has a disability, reasonable adjustment may be applied during assessment
- Language and literacy demands of the assessment task should not be higher than those of the work role

Range Statement

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. **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.

OHS requirements: are to be in line with applicable commonwealth,

RANGE STATEMENT

state or territory legislation and regulations, and organisational safety policies and procedures, and may include:

- personal protective equipment and clothing
- safety equipment
- first aid equipment
- fire fighting equipment
- hazard and risk control
- fatigue management
- elimination of hazardous materials and substances
- safe forest practices, including required actions relating to forest fire
- manual handling including shifting, lifting and carrying
- legislation
- organisational policies and procedures
- workplace practices

Environmental requirements
may include:

Legislative requirements:

are to be in line with applicable commonwealth, state or territory legislation, regulations, certification requirements and codes of practice and may include:

- award and enterprise agreements
- industrial relations
- Australian Standards
- confidentiality and privacy
- OHS
- the environment
- equal opportunity
- anti-discrimination
- relevant industry codes of practice
- duty of care

Organisational requirements
may include:

- legal
- organisational and site guidelines
- policies and procedures relating to own role and responsibility
- quality assurance
- procedural manuals
- quality and continuous improvement processes and standards
- OHS, emergency and evacuation procedures

RANGE STATEMENT

- ethical standards
 - recording and reporting requirements
 - equipment use, maintenance and storage requirements
 - environmental management requirements (waste minimisation and disposal, recycling and re-use guidelines)
- Work order** is to include:
- information and instructions for collecting, treating and storing seed
- and may also include:
- instructions for the environmental monitoring of work and procedures
 - environmental care requirements relevant to the work
- Appropriate personnel** may include:
- supervisors
 - suppliers
 - clients
 - colleagues
 - managers
- Environmental protection measures** may include:
- ground growth
 - canopy
 - general forest lean
 - wind speed and direction
 - fallen trees
 - density of trees
 - ground slope
 - soil and water protection
 - ground hazards
 - obstacles
- Approvals** may include:
- licences and permits required for commercial and non-commercial seed collection
 - government permits
 - landholder permits
- Relevant authorities** may include:
- local governments
 - parks and reserves managers
 - forestry managers
 - relevant government departments and agencies/ authorities, such as those involved in sustainability and environmental issues
 - relevant Indigenous organisations and agencies

RANGE STATEMENT

Equipment and resources may include:

- personnel
- vehicles
- pruning and shaking equipment
- sheets
- tarpaulins
- clean containers for holding seeds
- vacuum seed collecting machines
- ladders or elevated work platforms
- personal protective equipment

Planning includes:

consideration of:

- seed collection seasons
- when the required species have fruit at optimal condition

Communication may include:

- verbal and non-verbal language
- constructive feedback
- active listening
- questioning to clarify and confirm understanding
- use of positive, confident and cooperative language
- use of language and concepts appropriate to individual social and cultural differences
- control of tone of voice

Method of seed collection may include:

- collecting after falling or felling
- using ladders
- climbing
- shaking
- high-powered rifles
- cherry-pickers

Health of parent plant may require:

- hand picking
- careful and selective pruning

Labelling may include:

- seed location
- genetic identity

Separation methods may include:

- hand selection
- wind separation/winnowing
- sieving
- vibrating
- flotation
- drying

RANGE STATEMENT

- crumbling of husks
- Seed treatment** may include:
- heat
 - mechanical
 - chemical protection against pests
- Seed information** may include:
- time and date of harvest
 - time and date of receipt into store
 - weight
 - species
 - place or origin of seed
 - container identifier
- Packaging** may include:
- vacuum sealing
 - use of inert atmospheres, such as nitrogen and carbon dioxide
 - control of packing environment, including temperature, light and moisture
- Records and reports** may be maintained by:
- electronic database
 - card index
 - data sheets
 - filing systems
- and may be:
- manual
 - a computer-based system
 - other appropriate organisational communication system

Unit Sector(s)

Not Applicable

Competency field

Competency field Forest Growing and Management