



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **FPIFGM2201A Collect seed**

**Release: 1**

## **FPIFGM2201A Collect seed**

### **Modification History**

Not applicable.

### **Unit Descriptor**

This unit specifies 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 FPIFGM008A Conduct seed collecting operation

This unit specifies 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 FPIFGM008A Conduct seed collecting operation

### **Application of the Unit**

This unit supports the attainment of skills and knowledge required for competent workplace performance in forest and forest products operations of all sizes. The unit applies to a forest environment and involves application of skills and knowledge at a production worker level.

These skills and knowledge are to be used within the scope of the persons job and authority

This unit supports the attainment of skills and knowledge required for competent workplace performance in forest and forest products operations of all sizes. The unit applies to a forest environment and involves application of skills and knowledge at a production worker level.

These skills and knowledge are to be used within the scope of the persons job and authority

### **Licensing/Regulatory Information**

Refer to Unit Descriptor

### **Pre-Requisites**

Not applicable.

### **Employability Skills Information**

Not applicable.

## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency

Performance Criteria describe the required performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the Required Skills and Knowledge and/or the Range Statement. Assessment of performance is to be consistent with the Evidence Guide

Elements describe the essential outcomes of a unit of competency

Performance Criteria describe the required performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the Required Skills and Knowledge and/or the Range Statement. Assessment of performance is to be consistent with the Evidence Guide

## Elements and Performance Criteria

### Elements and Performance Criteria

| Element                   | Performance Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 Prepare to collect seed | <p>1.1 Applicable <b>Occupational Health and Safety (OHS)</b>, <b>legislative</b> and <b>organisational</b> requirements relevant to collecting seed are identified and complied with</p> <p>1.2 <b>Work order</b> is reviewed and clarified with <b>appropriate personnel</b></p> <p>1.3 Site <b>environmental protection measures</b> are complied with in accordance with relevant legislation and regulations</p> <p>1.4 Potential locations for the collection of required seeds are identified and required <b>approvals</b> are sought and obtained from <b>relevant authorities</b></p> <p>1.5 <b>Equipment and resources</b> appropriate to work requirements are selected and checked for operational effectiveness in accordance with manufacturer's recommendations</p> <p>1.6 Seed collecting operations are checked for safe working conditions and <b>planned</b> in accordance with site procedures</p> <p>1.7 <b>Communication</b> with others is established and maintained in accordance with OHS requirements</p> |

- 2 Collect seed
  - 2.1 Plant species and condition is 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 **health of parent plant**
  - 2.3 Seeds are 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 **labelled** in accordance with industry, site and organisational requirements
- 3 Clean and store seed
  - 3.1 Seeds are separated from other materials, weighed and stored in accordance with species requirements and site procedures
  - 3.2 **Seed treatment** is applied to prevent deterioration in accordance with seed species and site procedures
  - 3.3 **Seed information** is accurately recorded in accordance with site procedures
  - 3.4 Seeds are **packaged** for storage in accordance with industry, legislative and organisational requirements
  - 3.5 Seed collection information and results are **recorded and reported** in accordance with site procedures

## Required Skills and Knowledge

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

**Required skills include:**

comply with legislation, regulations, standards, codes of practice and established safe practices and procedures for collecting seed

review and accurately identify work requirements

use and maintain relevant equipment and resources

identify problems and equipment faults and demonstrate appropriate response procedures

use appropriate communication and interpersonal techniques with colleagues and others

accurately record and maintain information including details of seed species, weight and place of origin

efficiently and safely carry out seed collecting procedures

apply appropriate mathematical techniques to calculate seed weights and quantities

identify a range of seed species and apply accurate identifying information

use a range of seed collection methods and related equipment

liaise or negotiate with bodies or groups internal and external to the organisation

**Required knowledge and understanding includes:**

basic knowledge and understanding of applicable Commonwealth, State or Territory licensing, legislative, regulatory or certification requirements and codes of practice relevant to the full range of processes for collecting, treating and storing seed

organisational and site standards, requirements, policies and procedures for collecting seed

principles of cultural diversity and access and equity

environmental requirements for the collecting, treating and storing of seed and the disposal of waste material

established communication channels and protocols

problem identification and resolution

types of seed collecting resources and equipment and procedures for their safe use, operation and maintenance

procedures for the recording, reporting and maintenance of workplace records and information

hazards associated with the collection, treatment and storage of seed

range of seed species and appropriate collection, treatment and packaging processes

range of seed treatments and storage requirements for different seed species

types of diseases and pests likely to infect a range of seed species

appropriate mathematical procedures for estimation, measurement and calculation

## KEY COMPETENCIES

**These seven key competencies represent generic skills considered necessary for effective participation by an individual in the workplace**  
**Performance Level 1 - at this level, the candidate is required to undertake tasks effectively**  
**Performance Level 2 - at this level, the candidate is required to manage tasks**  
**Performance Level 3 - at this level,**

**thecandidateisrequiredtouseconceptsforevaluatingandreshapingtasks**

| Key Competency                                            | Example of Application                                                                                                                                                                   | Performance Level |
|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| How are ideas and information communicated?               | By communicating in simple language to confirm work requirements, convey information and requests to colleagues and report and record outcomes of seed collection, treatment and storage | 1                 |
| How can information be collected, analysed and organised? | By collecting, organising and understanding information required to undertake the collection, treatment and storage of seed                                                              | 2                 |
| How are activities planned and organised?                 | By organising work activities in the correct sequence for collecting, treating and storing seed to be completed within the designated timeframes                                         | 2                 |
| How is team work used?                                    | By using effective communication and interpersonal techniques with colleagues and others to maximise confidence, satisfaction and productivity during seed collection procedures         | 1                 |
| How are mathematical ideas and techniques used?           | By calculating time to complete tasks and quantities and weights of seed lots                                                                                                            | 1                 |
| How are problem solving skills applied?                   | By establishing safe and effective processes for collecting seed which anticipate likely problems to avoid wastage and downtime                                                          | 2                 |
| How is the use of technology applied?                     | By selecting and using appropriate equipment and resources to collect, treat and store seed                                                                                              | 1                 |



## Evidence Guide

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Packag

### 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 accordance with species requirements and organisational guidelines

### Critical aspects for assessment and evidence required to demonstrate competency in this unit

Comply with applicable Commonwealth, State or Territory legislative and regulatory requirements and codes of practice, including OHS, environmental and organisational policies and procedures, relevant to collecting seed

Comply with applicable licensing or certification requirements

Communicate effectively and work safely with others in the work area

Apply effective methods to collect a range of seed species in accordance with work order instructions and within prescribed organisational tolerances

Safely and efficiently use and maintain seed collecting equipment and resources

Efficiently and accurately treat and store seed in accordance with site and industry specifications

Accurately record seed collection information and results and maintain 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 essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an

off-site context

Assessment is to comply with relevant regulatory or Australian Standards requirements

The following resources should be made available:

workplace location or simulated workplace

materials and equipment relevant to collecting seed

specifications and work instructions

## Method of assessment

Assessment must satisfy the endorsed Assessment Guidelines of the FPI05 Training Package

Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of underpinning knowledge

Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies

Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning 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. Bold italicised wording in the Performance Criteria is detailed below

**OHS requirements are to be in accordance with Commonwealth, State or Territory legislation and regulations, and organisational safety policies and procedures. Requirements may include:**

the use of personal protective equipment and clothing  
safety equipment  
first aid equipment  
fire fighting equipment  
hazard and risk control  
elimination of hazardous materials and substances  
safe forest practices including required actions relating to forest fire  
manual handling including shifting, lifting and carrying  
handling of minerals/chemicals used in the treatment of seed for storage

**Legislative requirements are to be in accordance with applicable legislation from all levels of government that affect organisational operation. Requirements 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  
heritage and traditional land owner issues

### 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,

|                                          |                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                          | ethical standards, recording and reporting, access and equity principles and practices, equipment use, maintenance and storage, environmental management (waste disposal, recycling and re-use guidelines)                                                                                                                     |
| <b>Work order</b>                        | is to include information and instructions for collecting, treating and storing seed                                                                                                                                                                                                                                           |
| <b>Appropriate personnel</b>             | may include supervisors, suppliers, clients, colleagues, and managers                                                                                                                                                                                                                                                          |
| <b>Environmental protection measures</b> | 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 and obstacles                                                                                                                                        |
| <b>Approvals</b>                         | may include licences and permits required for commercial or non-commercial seed collection and may include government permits and landholder permits                                                                                                                                                                           |
| <b>Relevant authorities</b>              | may include local governments, parks/reserves managers, and forestry managers                                                                                                                                                                                                                                                  |
| <b>Equipment and resources</b>           | may include personnel, vehicles, pruning and shaking equipment, sheets, tarpaulins, clean containers for holding seeds, vacuum seed collecting machines, ladders or elevating work platforms, personal protective equipment                                                                                                    |
| <b>Planning</b>                          | includes consideration of seed collection seasons, when the required species have fruit at optimal condition                                                                                                                                                                                                                   |
| <b>Communication</b>                     | 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 and body language |
| <b>Method</b>                            | of collection may include collecting after falling/felling, ladders, climbing, shaking,                                                                                                                                                                                                                                        |

|                               |                                                                                                                                                                                                   |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                               | high-powered rifles, cherry-pickers                                                                                                                                                               |
| <b>Health of parent plant</b> | may require hand picking or careful and selective pruning                                                                                                                                         |
| <b>Labelling</b>              | details seed location and genetic identity                                                                                                                                                        |
| <b>Separation methods</b>     | may include hand selection, wind separation/winnowing, sieving, vibrating, flotation, drying and crumbling of husks                                                                               |
| <b>Seed treatment</b>         | may include heat, mechanical or chemical protection against pests                                                                                                                                 |
| <b>Seed information</b>       | includes details of time/date of harvest, time/date of receipt into store, weight, species, place or origin of seed, container identifier                                                         |
| <b>Packaging</b>              | may include vacuum sealing, use of inert atmospheres such as nitrogen and carbon dioxide, control of packing environment (temperature, light and moisture)                                        |
| <b>Records and reports</b>    | may be maintained by electronic data base, card index, data sheets, and filing systems<br>may be manual, using a computer-based system or another appropriate organisational communication system |

## **Unit Sector(s)**

Not applicable.

## **Competency Field**

Forest Growing and Management  
Forest Growing and Management