



Australian Government

FDFWGG2006A Obtain and process rootlings

Release: 2

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Modification History

April 2012: Minor typographical corrections.

Unit Descriptor

Unit descriptor	This specialist unit has been developed for the wine grape growing stream of the wine sector. It covers the processing of vine rootlings in wine grape nurseries including, where required, digging of rootlings from field nurseries.
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Application of the Unit

Application of the unit	This unit applies to wine grape growing and covers the processing of rootlings. Rootlings may include those developed from cuttings in a sand bed or callusing room, or those freshly dug from a field nursery.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Employability skills	This unit contains employability skills.
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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 process rootlings	1.1 Work instructions for the processing of rootlings are confirmed and understood 1.2 Facilities are cleaned and sterilised to minimise risk of contamination 1.3 Materials are confirmed as available and ready to meet requirements 1.4 Equipment is collected and checked for serviceability and sterilised as required by workplace procedures 1.5 Potential and existing hazards are identified, rectified and/or reported according to workplace procedures
2. Obtain rootlings	2.1 Requirement for rootlings from field nurseries, sand beds or callusing are checked against instructions 2.2 Rootlings if required are dug from field nurseries using tractor mounted or trailed digging machines or hand-held tools 2.3 Rootlings are obtained from sand beds or callusing room according to requirements
3. Process rootlings	3.1 Rootlings are treated and bundled according to instructions 3.2 Bundles are labelled, packed and stored according to instructions 3.3 Waste is collected and disposed of according to workplace procedures 3.4 Work is conducted in accordance with workplace environmental guidelines 3.5 Problems and anomalies are identified, rectified and/or reported according to workplace procedures 3.6 Safe work practices are employed to minimise work hazards
4. Prepare rootlings for dispatch	4.1 Bundles of rootlings are assembled according to instructions 4.2 Rootlings are prepared and packed for dispatch according to instructions 4.3 Stock is loaded for dispatch according to instructions 4.4 Orders are checked against goods being dispatched according to workplace procedures 4.5 Safe work practices are employed to minimise work hazards
5. Record information	5.1 Workplace information is recorded in the appropriate format

Required Skills and Knowledge

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

Required skills include:

Note: The following required skills should be applied as appropriate to the equipment and processes that are used in the particular winery or workplace.

Ability to:

- access workplace information to identify rootling processing requirements
- confirm supply of necessary materials
- liaise with other work areas
- select, fit and use appropriate personal protective clothing and/or equipment
- select, operate, maintain and store required equipment according to instructions
- maintain work area and equipment to meet workplace housekeeping and hygiene standards
- use appropriate cleaning techniques
- recognise problems and anomalies and correct and/or report them as instructed
- identify, rectify and/or report environmental non-compliance
- maintain workplace records
- select and use materials as required
- prepare chemical treatments to required concentration and ensure a homogenous mix
- handle rootlings correctly
- treat rootlings as instructed. This may include:
 - complete hydration of all rootlings
 - complete chemical treatment of all rootlings
 - removal of unwanted plant material
- monitor the standard of rootlings and grade them as instructed. This may include sorting for:
 - diameter of stem
 - appearance
 - length and number of shoots
 - strength of graft union
- bundle and label rootlings as instructed. This may include:
 - ensure correct numbers per bundle
 - lay rootlings all the same way in bundles
 - tie bundles securely
 - label legibly and accurately
- pack and store rootlings as instructed. This may include meeting instructions for:
 - cold room layout
 - cold room temperature variations
 - customer requirements
 - storage time requirements

- collect and dispose of waste as required to minimise risk of environmental damage
- check stock against orders. This may include checking order requirements for:
 - quantity of stock
 - varieties and clones
 - quality of stock is within specifications
- dispatch stock as instructed. This may include:
 - correct manual handling
 - correct use of mechanical transfer equipment
- liaise with customers. This may include:
 - taking orders
 - notifying customers about availability of stock
 - notifying customers about dispatch dates
 - identifying specific treatments of stock
- use oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce.

Required knowledge includes:

Note: The following required knowledge should be applied as appropriate to the equipment and processes that are used in the particular winery or workplace.

Knowledge of:

- occupational health and safety (OHS) hazards and controls
- purpose and application of personal protective clothing and/or equipment
- correct operating procedures for equipment
- safe and effective handling of equipment
- principles of nursery hygiene
- cleaning requirements and procedures for work area and equipment
- reporting and recording requirements and procedures
- procedures and responsibilities for reporting problems and anomalies
- waste disposal requirements and procedures
- environmental issues and controls
- equipment operation and maintenance requirements and procedures
- safe preparation and handling of chemicals
- common features of healthy vine rootlings
- common features of unhealthy vine rootlings
- factors that influence how a rootling should be graded and why
- package, storage requirements and procedures for rootlings ready for sale
- rootling preparation requirements and procedures for sales or transfers to customers.

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	Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of ability to: • use personal protective equipment, (MSDS and follow other specified OHS procedures • handle chemicals and disinfectants correctly • select and mix chemical treatments to required concentrations • sterilise equipment and work surfaces to instructions • obtain rootlings correctly from required sources (e.g. field nursery, sand beds or callusing room) • treat, bundle, store and label rootlings correctly • identify and report problems and anomalies • treat and dispose of waste correctly • keep appropriate records.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • personal protective clothing and equipment as required • work procedures, including advice on company practices, safe work practices, food safety, quality and environmental requirements • instructions, information, specifications and schedules as required • equipment, services and corresponding information as required • products and materials as required • internal and external customers and suppliers as required • cleaning procedures, materials and equipment as required • documentation and recording requirements and

EVIDENCE GUIDE	
	procedures.
Method of assessment	This unit should be assessed together with other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competence 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

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.	
Policies and procedures	Work is carried out in accordance with workplace procedures, licensing requirements and legislative requirements
Workplace information	Workplace information can include: • Standard Operating Procedures (SOPs) • specifications • production schedules • instructions • routine maintenance schedules • work notes • Material Safety Data Sheets (MSDS) • manufacturer instructions • verbal direction from manager, supervisor or senior operator
Wine grape nursery facilities	Wine grape nursery facilities may include: • cold storage • bins • water

RANGE STATEMENT	
	• fungicide treatment areas • storage bins or tanks • soakage tanks
Equipment	Equipment may include: • secateurs • personal protective clothing and/or equipment • bins • boxes • counting machine • packing machine • forklift
Materials	Materials may include: • string • labels • chemicals • sand • wax • pallets
Waste	Waste may include: • off-cuts • dropped or rejected rootlings • packaging materials
Work hazards	Work hazards may include: • damaging fingers or eyes from use of tools and equipment • manual handling • lifting bundles • falling over in an untidy work area • using chemicals and disinfectants
Problems and anomalies	Problems and anomalies may include: • evidence of nematodes • crown gall • dehydration • infection • physical damage • damaged buds • immature wood

RANGE STATEMENT	
Rootlings	Rootlings may include: • those developed from cuttings in a sand bed or callusing room • those freshly dug from a field nursery
Grading rootlings	Grading rootlings may include sorting for: • diameter of stem • appearance • length of shoots • number of shoots • strength of graft union
Label information	Label information may include: • class of the material • variety and clone • grade of cutting • the source identification code • name of customer • date packed
Treatments	Treatments may include: • hydration • chemical treatment • trimming • grading
Customer requirements	Customer requirements may include: • quantity • level of root trimming • level of shoot trimming
Packing	Packing may include: • packing, venting and sealing cuttings into polythene film bags • wrapping cuttings in wet hessian • packing in woven polypropylene wool packs
Loading of rootlings	Loading of rootlings may be: • done manually or with the use of a forklift
Records	Records will include: • number of rootlings per bundle

RANGE STATEMENT

- number of bundles
- treatments
- date

Unit Sector(s)**Unit sector**

Wine operations