



Australian Government

FDFWGG3011A Perform shed nursery activities

Release: 2

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Modification History

This unit supersedes and is equivalent to FDFWGGSNAB Perform shed nursery activities.
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 skills and knowledge required to treat and prepare vine cuttings and freshly dug rootlings for sale or planting in the vineyard.
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Application of the Unit

Application of the unit	This unit includes preparation for plantings, treating and callusing cuttings, care of rootlings and preparation for transfer and transportation.
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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 cuttings for callusing	1.1 Cuttings are counted, bundled and labelled according to instructions as required 1.2 Cuttings are chemically treated according to instructions 1.3 Cuttings are stored according to instructions
2. Prepare and maintain callusing environment	2.1 Sand bed or callusing room is prepared according to workplace procedures 2.2 Cuttings are placed into callusing environment according to instructions 2.3 Optimum callusing environment is maintained
3. Prepare rootlings for customer or planting	3.1 Rootlings are trimmed, graded, packed and stored according to instructions 3.2 Waste is collected and disposed of according to workplace procedures 3.3 Problems and anomalies are recognised, rectified and/or reported 3.4 Work is conducted in accordance with workplace environmental guidelines
4. Record information	4.1 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 nursery requirements
- select, fit and use appropriate personal protective clothing and/or equipment
- liaise with other work areas and customers
- count, bundle and label cuttings as required
- treat cuttings as required prior to callusing. This may include:
 - fungicide treatment
 - re-hydration
 - scoring
 - root promoter treatment
 - cutting just below basal bud
 - assimilation after cool storage
- store cuttings. This may include maintaining and monitoring cold storage facilities
- prepare sand bed or callusing room. This may include:
 - packing sand or vermiculite
 - lining boxes
 - ensuring heaters and ventilators are working correctly to required temperature
- plant or place cuttings in callusing environment. This may include:
 - feeling into ground or sand
 - packing into boxes with vermiculite
 - watering in
 - correct number of cuttings per box
 - spacing (e.g. not too tight)
 - correct way up (e.g. basal end at bottom)
 - arranging according to variety, clone and source
 - labelling and mapping of beds
 - adding hormone mixes
- maintain optimum callusing environment. This will include consideration of:
 - temperature
 - relative humidity
 - moisture levels of growing medium
 - weed and pest prevention
- trim rootlings (top growth and roots) ready for planting

- grade rootlings according to workplace or customer requirements and standards
- pack rootlings. This should include consideration of:
 - customer requirements
 - maintenance of rootling health
 - minimisation of vine damage
 - mode of transport
 - destination time
 - storage time and method
 - prevention of dehydration
- recognise problems and anomalies with vines, equipment and materials
- take corrective action in response to out-of-specification results, activity or non-compliance
- report and/or record problems and/or corrective action
- identify, rectify and/or report environmental non-compliance
- collect, sort, grade, treat and/or dispose of waste as required
- handle cuttings or rootlings to minimise damage
- select and operate equipment as required
- select and use materials as required
- maintain work area to meet housekeeping standards
- clean equipment as required
- prepare and mix chemicals as required
- conduct routine maintenance of equipment according to enterprise procedures
- 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:

- common features of healthy vine cuttings or rootlings. This may include:
 - thickness of original cane
 - no evidence of pests and diseases
 - number, strength and distribution of new roots
 - number, maturity and distribution of shoots
 - visually complete and robust graft union
- common features of unhealthy vine cuttings or rootlings. This may include:
 - galls on stem (e.g. crown gall)
 - galls on roots (e.g. nematodes)
 - no shoots or roots
 - damaged or destroyed buds

- excessive disease staining or spots on canes
- immature wood
- shoots on incorrect nodes
- faulty or broken graft unions
- too few or unevenly distributed root development
- pre-callusing treatment requirements
- purpose and benefit of treatments
- storage requirements of cuttings prior to callusing
- preparation requirements of callusing environment
- callusing options (e.g. features, pros and cons)
- optimum callusing environment and its effect on the vine cutting
- common problems that occur during callusing and how they should be resolved (e.g. uneven callusing or evidence of dehydrated cuttings on arrival)
- preparation requirements for rootlings and procedures for sales or transfer to vineyard
- package or storage requirements and procedures for rootlings ready for sale or transfer
- factors that influence how a cutting should be graded and why
- reasons for specific requirements, for example:
 - rootling preparation
 - packing preparation
 - packaging and storage requirements
- waste disposal requirements and procedures
- reporting and recording requirements and procedures
- safe handling of chemicals
- equipment operation requirements and procedures
- Occupational health and safety (OHS) hazards and controls
- procedures and responsibilities for reporting problems
- environmental issues and controls
- cleaning requirements and procedures for work area and equipment. This should include additional considerations when cleaning between batches and varieties
- safe preparation and mixing of chemicals
- routine maintenance procedures for equipment where relevant.

Evidence Guide

EVIDENCE GUIDE	
<p>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.</p>	
<p>Overview of assessment</p>	<p>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.</p>
<p>Critical aspects for assessment and evidence required to demonstrate competency in this unit</p>	<p>Evidence of ability to:</p> <ul style="list-style-type: none"> • use personal protective equipment, MSDS and follow other specified OHS procedures • conduct cutting and callusing activities • monitor the health of and tend rootlings • prepare for, implement and monitor nursery activities • prepare vine rootlings for transport • maintain nursery environment to optimise plant health • complete documentation.
<p>Context of and specific resources for assessment</p>	<p>Assessment must occur in a real or simulated workplace where the assessee has access to:</p> <ul style="list-style-type: none"> • 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 procedures.
<p>Method of assessment</p>	<p>This unit should be assessed together with other units of competency relevant to the function or work role.</p>

EVIDENCE GUIDE

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

Rootlings

Rootlings may include:

- those developed from cuttings in a sand bed or callusing room
- those freshly dug from a field nursery

Equipment

Equipment may include:

- secateurs
- personal protective clothing and/or equipment

RANGE STATEMENT	
	<ul style="list-style-type: none"> • bins • boxes • spades • trowels • watering or irrigating equipment • heating equipment • packing machine • counting machine
Materials	<p>Materials may include:</p> <ul style="list-style-type: none"> • string • labels • chemicals • sand • wax
Problems and anomalies	<p>Problems and anomalies may include:</p> <ul style="list-style-type: none"> • evidence of nematodes, crown gall, dehydration, infection, physical damage and graft union failure
Facilities	<p>Facilities may include:</p> <ul style="list-style-type: none"> • cold storage • callusing room • hot beds • sand storage bins • water • fungicide treatment areas • storage bins or tanks • soakage tanks • glasshouses
Work hazards	<p>Work may involve exposure to:</p> <ul style="list-style-type: none"> • chemical, dangerous or hazardous substances

Unit Sector(s)

Unit sector	Wine operations
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